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ABSTRACT

Activities of the East-West Culture Learning Institute, founded on the premise that patterns of a particular culture may be learned, are reported in Volume I of an annual publication. Papers written by the members of the Institute's staff and former Fellows describe research in progress in four major areas of concern. A paper in the area of "Thought and Expression" presents a view of what this area entails and of some potential research projects. The "Cultures in Contact" area is represented by three papers: one on the concerns of changes in individuals as a function of cultures coming into contact; a second on the individual culture-learner who voluntarily chooses to live in a culture other than his own; and a third on techniques successfully used in cross-cultural orientations. The "Cultural Identity" area is covered in a paper on issues involving identity during development of educational systems. The fourth area, "Language in Culture," includes a presentation of transformational grammar and two articles concerned with the socio-linguistic aspects of language change. A list of other Institute publications currently available and information for contributors are included in the text. (Author/KSM)

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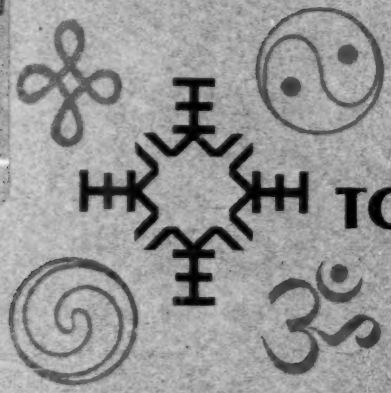

TOPICS IN CULTURE LEARNING

Volume I 1973

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EAST-WEST CENTER
HONOLULU, HAWAII

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THE EAST-WEST CENTER is a national education institution established in Hawaii by the United States Congress in 1960. Formally known as "The Center for Cultural and Technical Interchange Between East and West," the federally-funded Center is administered in cooperation with the University of Hawaii. Its mandated goal is "to promote better relations between the United States and the nations of Asia and the Pacific through cooperative study, training, and research."

Each year about 2,000 men and women from the United States and some 40 countries and territories of Asia and the Pacific area work and study together with a multi-national East-West Center staff in programs dealing with problems of mutual East-West concern. They include students, mainly at the post-graduate level; Senior Fellows and Fellows with expertise in research and/or practical experience in government and business administration; professional study and training participants in non-degree programs at the teaching and management levels; and authorities in various fields meeting in international conferences and seminars.

A fundamental aim of all East-West Center programs is to foster understanding and mutual respect among people from differing cultures working together in seeking solutions to common problems. The Center draws on the resources of U.S. mainland universities, and Asian/Pacific educational and governmental institutions as well as organizations in the multicultural State of Hawaii.

Participants are supported by federal scholarships and grants, supplemented in some fields by contributions from Asian/Pacific governments and private foundations.

Center programs are conducted by the East-West Communication Institute, the East-West Culture Learning Institute, the East-West Food Institute, the East-West Population Institute, and the East-West Technology and Development Institute. Open Grants are awarded to provide scope for educational and research innovation, including a new program in humanities and the arts.

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TOPICS IN CULTURE LEARNING

Edited by Richard W. Brislin

August 1973

East-West Center
East-West Culture Learning Institute
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PREFACE

Topics in Culture Learning reports the multi-national, multi-disciplinary activities of the East-West Culture Learning Institute. These activities are based on the premise that a culture is a society's way of life which expresses certain meanings and values in humanistic achievements, institutions and forms of patterned behavior and on the assumption that the patterns of a particular culture may be learned.

The Institute has identified four areas of interest, Cultures in Contact, Language in Culture, Cultural Identity and Thought and Expression in Culture Learning, in each of which scholars from countries in Asia, the Pacific and from the United States are seeking fresh insights into problems encountered by persons who wish to understand another person's culture as well as their own.

This first issue of Topics contains papers written by members of the Institute's staff and former Institute Fellows and describes research in progress in all four areas.

We hope that this modest annual publication will be of interest and benefit to readers who believe that one positive approach towards the establishment of better mutual understanding between nations is through cooperative educational programs and research aimed at developing more valid descriptions of problems for which different cultures offer different answers and ask different questions.

Verner C. Bickley
Director
East-West Culture Learning Institute

INTRODUCTION

The danger of establishing an institute dealing with culture learning is that the area covers so many potentially researchable topics that work within the institute could easily become diffuse and unfocused. Realizing this, members of the Culture Learning Institute have designed four topical areas, all of them incorporating a number of specific research projects. The eight papers in this volume reveal some of the progress that has been made in conceptualizing the four topical areas as well as some of the accomplishments that have been made.

John Walsh's paper presents some of his ideas about the "Thought and Expression" topical area. He states clearly his views of what this area entails and what some potential research projects are, but he does not concern himself here with the many methodological details that must be faced before a worthwhile study will emerge from this area. It seems to the editor that many people who will be attracted to this area will have previously studied literature, philosophy, or more broadly the humanities. It is possible that these people will have to do a great deal of "retooling" in the methods of the behavioral sciences if they are to do the type of studies Walsh outlines. Such methodological training is rarely part of their backgrounds.

The "Cultures in Contact" area is represented by three papers. To date, most of the research in this area has centered around changes that occur in individuals as a function of cultures coming into contact, especially change leading to new learning. Brislin enumerates a number of concerns that permeate empirical research and is willing to run the risk that one or more of his points will be underdeveloped. It was thought valuable to outline the many concerns in one place since previously they were spread widely throughout an extremely diffuse literature. Stephen Bochner centers on a central interest, that of the individual culture-learner who voluntarily chooses to live in a culture other than his own. The thesis is presented and defended that one goal of international educational programs should be to develop multicultural people capable of dealings beyond just their own or even beyond two or three cultures. The special cultural sensitivities that must be developed in such multicultural people are poorly understood at present, but these qualities will surely be the focus of continued examination. The danger in Bochner's paper is that his firm statements about multiculturality and especially about his own recent study will be overinterpreted by readers. At this very early stage of investigation it would be best to regard Bochner's statements as hypotheses rather than as proven facts.

Gregory Trifonovitch has established a major reputation for himself in the Pacific for excellence in cross-cultural orientation programs. These short-term orientations are designed to help people of one culture to learn about and interact effectively in another culture. The editor asked Trifonovitch to write about the techniques he has used and which seemed successful, and the result makes for compelling reading. The paper is not a scholarly evaluation of an orientation program but is certainly the type of article that scholars interested in such orientations will want to study carefully. The analysis of the types of experiences that cause people to view a new culture differently is also of central concern to the "Cultures in Contact" area.

"Cultural Identity" is another of the four topical areas, and the paper by James Ritchie covers a large number of issues involving identity when countries develop their own educational systems rather than depending upon outside impositions. It is interesting

that his paper highlights many of the ideas brought out by participants in the "Second Summer Program in Intercultural Studies," even though Ritchie's paper was written prior to the program. This three-week seminar was organized by members of the Culture Learning Institute (John Walsh, director) during the summer of 1973 and was concerned specifically with "Cultural Identity Problems." Ritchie points out efforts to incorporate local culture and history into school curricula, giving defenses at every step. With a high degree of sensitivity, he also covers the tenuous role of the outside consultant, a person who should stimulate but not overwhelm, who should contribute but not design totally, and who should fade into the background when credit is to be given. This treatment also makes the paper of interest to the "Cultures in Contact" area. The curriculum innovations Ritchie outlines should contribute to cultural identity in the form of convincing people that they belong to a viable and important culture. Inferiority feelings at not possessing such innovations as American-type superhighways will hopefully disappear.

Since Mark Lester introduces the content matter of the "Language in Culture" area as a preface to his own paper, it need not be repeated here. Lester's presentation of transformational grammar, a recent contribution of his own discipline (linguistics), is clear and sophisticated. The treatment of learning theory, however, bears little similarity to current thinking in psychology. If readers feel that the best of cognitive psycholinguistics versus current learning theory is being compared with respect to first language learning, this would be a mistake, and hence Lester labels his treatment of learning as "classical." An excellent project for the future would be an analysis of the most current and creative thinking in both linguistics and psychology, centering on places where opposite explanations or predictions about language learning are made. Going further into this admittedly difficult task, it would be beneficial to suggest critical sets of data that might be gathered so that a decision between explanations could be made. Such a project will necessitate interdisciplinary cooperation since the amount of material within <u>both</u> disciplines that could be brought to bear on the subject is too vast for one person to handle.

The articles by Masanori Higa and Verner Bickley are concerned with the sociolinguistic aspects of language change, Higa with word-borrowing and Bickley with factors influencing the widespread adoption or rejection of non-indigenous languages. Central to both papers are concerns with language and its relation to feelings of nationalism, thus making the articles of relevance to both the "Language in Culture" and "Cultural Identity" areas. Both papers indicate the extreme emotions that occur over issues involving language imposition, either individual words or entire languages. Adding to Higa's list of projects that could possibly use word borrowing as an index, the editor would add "reactions to change." For instance, Higa makes a case that the word "datas" is beginning to be accepted in English, and he uses the word throughout his paper. Other readers, accustomed to using "data" as plural of "datum" will be uncomfortable with his usage. As Higa points out, there is a transition period between the time during which a word is not used and the time that it is widely accepted. Opinions concerning the "arrival time" for certain words will vary among different writers.

Behavioral scientists are often nonchalant about historical data, preferring to analyze current events and current problems, often as if the issue were new to the current generation of active researchers. Bickley admirably avoids this tendency in his paper by examining both historical and contemporary factors that influence language imposition. His analysis should suggest general principles that can be applied to other parts of the world.

The most valuable commodity in any research endeavor is good ideas, and it is interesting that there are various ideas that have been adopted by more than one of the authors in this volume. The idea that a person's competence cannot be equated with his performance is analyzed by Brislin, Trifonovitch, and Lester. As mentioned above, Higa and Bickley both cover the relation between language and feelings of nationalism, and this theme is also present in Ritchie's paper. The necessity, in curriculum development, of fitting teaching and learning materials to the background of students was mentioned by both Brislin and Ritchie. Trifonovitch outlined one approach to cross-cultural orientations,

and the types of information found in the projects suggested by Higa (significance of borrowed words) and Walsh (maxims as central to the values of cultures) would be excellent input to such programs. Such cross-fertilization of ideas among workers in the four areas at the Culture Learning Institute is one of its most valuable assets.

Richard W. Brislin

THOUGHTS ABOUT "THOUGHT AND EXPRESSION" IN CULTURE LEARNING

JOHN E. WALSH
RESEARCH ASSOCIATE
CULTURE LEARNING INSTITUTE
EAST-WEST CENTER

We start with two short, clear examples:

1. James Michener, the celebrated novelist who is also something of a Japanologist, reports in Orientations (1971), that when Jack Levine, "one of America's finest draftsmen" went to Japan and did a series of sketches about the people and places of that country" . . . (He) saw more deeply into the style of Japanese life than most of us are able to see after years of familiarity." (p. 28)

   Levine's case is that of an American artist learning another culture by sensitively observing it and interpreting it in his own masterful sketches. Many people who see Levine's sketches will agree with Michener that "the Levine sketchbooks fit into the tradition of Asian art. Painters and woodblock artists in both China and Japan delighted in stockpiling sketchbooks which they subsequently allowed the public to inspect." (p. 26) In this example, Levine himself happens to be an artist, but seeing deeply into important aspects of a culture through a study of its forms of artistic expression is by no means a learning experience open to artists only.

2. The Mrus are a tribe of some 20,000 people indigenous to Bangladesh. Claus-Dieter Brauns, in studying the Mru culture, asked one of the village elders the meaning of the "festival of the cow sacrifice," a highlight of the Mru year. He received the following explanation: "Long ago the great spirit, Torai, gave all other people a written language and rules for their lives. Only we Mrus were left out by some dreadful accident. Our desperate forefathers . . . hungry and ill . . . sent a cow to Torai to ask for help. Torai wrote his rules on banana leaves, but the evil animal ate them. Our revenge is this sacrifice." Brauns concludes that, "The myth gives the Mrus both a sense of their place in history and a justification for their poverty." (1973, p. 271)

   Whether the village elder is accurate in his description of one of the central features of Mru thought is not the point here. His description rather illustrates the well-known fact that cultures develop distinctive ways of viewing the world and that these views then become thought patterns and systems of logic which serve as a basis of action and behavior. That the Mru think of themselves as having been left out of the beneficent dispensations of the great spirit, Torai, cannot but influence profoundly their attitudes and their values.

This essay will attempt: (1) to make clear what we in the East-West Center Culture Learning Institute mean by the phrase "Thought and Expression in Culture Learning." (2) To explore some of the ways in which a study of the thought and expression of a given culture might lead to deeper knowledge, fuller understanding and keener appreciation of the people of that culture. In considering these two issues we will also examine some of the problems that arise in attempting to interpret the thought and expression of particular cultures and we will take a brief look at some interesting research possibilities.

Background Ideas

The phrase "Thought and Expression in Culture Learning" is not as precise as we might like. Some will consider it too comprehensive and others too static and rigid. It is too comprehensive because what, after all, is a culture other than what the people of that culture think about life and how they express themselves in their behavior and their arts? It is too static because thought and its overt manifestations and expressions are constantly changing even within those cultures which are seemingly most isolated, self-contained, and closed to outside influences. Further, some people, hearing the phrase as it stands alone, might infer that we are interested in studying only that aspect of a culture which deals with its loftiest and best creations, that is, the so-called "Higher Culture" as distinguished from the general culture of the broad numbers of people. In short, "Thought and Expression in Culture Learning" might be held to say both too little and too much about what we are studying.

In the East-West Center Culture Learning Institute we use "Thought and Expression in Culture Learning" in much the same way, however, as the terms The Humanities and The Arts are used in other types of educational institutions. In every culture there is always a greater or lesser amount of thought and attention given to the natural and the physical sciences, to the social sciences, and to technology. We do not mean in any way to minimize either the importance or the power of scientific and technological thought or to argue the question as to whether scientific thought and its many applications is any more or less human than the thought called "humanistic." Certainly, one of the ways of learning a culture and about a culture is to examine the ways in which the culture treats its scientists and encourages the advancement of science. Another way . . . and perhaps even a more important way in the final analysis . . . is to study what the culture thinks about human life itself and how it expresses its feelings in its arts.

Within the context of the Culture Learning Institute, then, "Thought and Expression in Culture Learning" is limited to that thinking and those forms of expression which, while making no claim to be scientific, deal with some of the person's basic needs and aspirations. By "thought" we do not mean all thought but only that which involves man's pervasive attempt to find such things as purpose, significance, beauty, goodness, joy, hope, and love in his life and that of his fellowmen. Such "thought" is most often a consistent way of thinking rather than a random selection of ideas drawn arbitrarily from different sources; it does not exclude, but nor is it limited to, the impressionistic, intuitive, emotion-ladened, concrete, and attitudinal, although it is almost certain to have some logic of its own. Involving values and priorities, it is thought about which aspects of life are most worthwhile, most transcendent, and most biophylic--the term Erich Fromm uses to indicate those tendencies which in both the long and the short run advance life and the enlargement of human potential rather than death and disintegration.

By "expression" we do not mean every and all forms of expression. For our purposes, that is, as a way of learning a culture, we are concerned only with those forms of artistic expression which are seen as laying bare the spirit of the culture and which tell us of its interests, its pursuits, its longings, its creative instincts and capabilities, its response to beauty and its ways of capturing it. For example, Lady Murusaki has Genji say in The Tales of Genji: "The sight of something very beautify, were it only a common flower or tree, might in an instant make life again seem full of meaning and reality." Just as there

are many modes of thinking within and among cultures so also are there many varieties of expression. People express themselves not only in the fine arts and the practical arts but even in such everyday things as the way they walk, the way they eat, and the way they dress. A careful study of any form of expression would, of course, contribute something to culture learning but the "Thought and Expression in Culture Learning" area of the Culture Learning Institute necessarily limits itself to the study of those specific expressions which are deemed to be most indicative of the character or life of the culture. Among these are architecture, songs, dances, the drama, movies, and television.

A word about "Culture Learning" itself may be helpful in explaining what we are trying to achieve in the "Thought and Expression" area.

It is assumed that a culture can be viewed as a body of knowledge, namely, that it is something that is knowable and can be learned to a greater or lesser extent. It is a proper object of investigation and inquiry as much as is any other body of knowledge or discipline. A culture is by definition that which people have and share in common rather than what they think and do as individuals. To be sure, a culture is a complex, intricate, and changing body of knowledge, but if it is in fact a culture it will inevitably reveal certain structures or patterns in both its thought and its expression that can be learned by those born within the culture and by those who are born outside it but who wish to learn it. Ruth Benedict stated this concept well when she wrote in her popular study of Japanese culture: " . . . I started from the premise that the most isolated bits of behavior have some systematic relation to each other. I took seriously the ways hundreds of details fall into over-all patterns. A human society must make for itself some design for living. It approves certain ways of meeting situations, certain ways of sizing them up. People in that society regard these solutions as foundations of the universe. They integrate them, no matter what the difficulties. Men who have accepted a system of values by which to live cannot without courting inefficiency and chaos keep for long a fenced-off portion of their lives where they think and behave according to a contrary set of values. They provide themselves with some common rationale and some common motivations. Some degree of consistency is necessary or the whole scheme falls to pieces." (Benedict, 1946, pp. 11-12)

As body of knowledge, a culture taken as a whole would be learned in much the same way as any other body of knowledge is learned. Though we are coming to know a great deal about the learning process in controlled laboratory situations, we still know far too little about learning in natural settings. That domain of knowledge . . . called a culture . . . must be learned in a natural setting. Yet there is good empirical evidence to support Jerome S. Bruner's view that, "Any domain of knowledge (or any problem within that domain of knowledge) can be represented in three ways: by a set of actions appropriate for achieving a certain result (enactive representation); by a set of summary images or graphics that stand for a concept without defining it fully (iconic representation); and by a set of symbolic or logical propostions drawn from a symbolic system that is governed by rules or laws for forming and transforming propositions (symbolic representation)." (Bruner, 1968, pp 74-75)

In other places in the same book Bruner states that: "It is this that leads me to think that the heart of the educational process consists of providing aids and dialogues for translating experience into more powerful systems of notations and ordering." (Ibid. p. 21) And, "any idea or problem or body of knowledge can be presented in a form simple enough so that any particular learner can understand it in a recognizable form." (Ibid. p. 44)

I will return later in this essay to say more of culture learning as a specific kind of learning and the three ways in which the learning of a culture might proceed. For the moment I would like to point out that culture learning, like all learning, is measured by one's ability to make ever more powerful and precise generalizations; for certain purposes these statements will be bases for accurate predictions. Thus the final test of culture learning is the degree to wich the learner is able to make valid and more profound generalizations about the culture he is studying and the extent to which he can predict what the people living in a

given culture will think, do, feel, and value in given real circumstances. This ability is not distributed among individuals in equal proportion and consequently, for a number of reasons we need not go into here, some individuals are better "culture learners" than others.

The question immediately arises: If culture learning consists primarily in the increasing ability to make more powerful, rigorous, and valid generalizations about a culture, from whose point of view are the generalizations said to be valid? Are they valid from the viewpoint of the learner or from the viewpoint of the "culture-being-learned"? Does not the culture learner necessarily bring all the assumptions--perhaps even all of the prejudices and predispositions--of his own cultural background to his process of learning another culture? These questions are very much the same as those that have haunted cultural anthropology since its inception and which has never been resolved to everyone's satisfaction: Does one best learn a culture "from within," that is, on its own terms, or does one best learn a culture by making every effort to gain a more or less objective and detached vantage point? Does the learner have to experience the culture in the same way the people who are members of the culture experience it before he can be said to be engaging in genuine culture learning?

The answers usually given to these and similar questions are not very helpful because, at least so it seems to me, they imply a misunderstanding in the practical order of the nature of culture learning. If a culture is a set, a structure, or a pattern of values, ideas, skills, and outlooks on life and if what one wants to learn are the values, ideas, skills, and attitudes of a particular culture, then one goes to whatever one conceives to be the best and most appropriate sources for learning what one wants to learn. Genuine learning is always a reciprocal process involving the whole person of the learner, the subject matter or that which is to be learned, and the way in which these two come together and interact. Any generalization made about a culture is valid to the extent that it follows from the evidence and clear insight and to the extent that it in fact says something that has truth-value. Thus, for example, to say that the people of Culture X give a high priority in their thinking and general behavior to personal relationships is valid if in fact the people of Culture X do give a high priority to personal relationships. Its validity is not measured by the cultural background of the one who makes the generalization but by the evidence which supports the generalization. A culture learner may well overlook crucial aspects of a culture if he does not know where to look or how to look; he may in fact go so far as to make false generalizations or draw false conclusions about it, but this means only that his learning is defective, not that culture learning differs essentially from other kinds of learning.

Finally, it is also necessary to stress by way of background that the study of the thought and expression of a culture includes the popular or folk forms of thought and expression as well as those that are more recondite and sophisticated. Both the thought and the expression of a culture exist on a continuum ranging from the ordinary and commonplace to the intricate and highly complex. In culture learning it is important to know, for example, the thought expressed in the culture's daily newspapers or their equivalents and alternatives as well as in the books of its scholars. Simple movies and grand operas are equally forms of expression. Architectural preferences are expressed in individual dwellings as well as in the most elaborate public buildings and monuments. The philosophy and religion of the man in the field or in the factory can reveal aspects of the culture that may not be taught in the colleges and universities.

How Thought and Expression Function as Subject Matter of Culture Learning

Man's ability to think and his reflective consciousness distinguish him from other forms of animal life and make possible the formation of distinctively human cultures. He communicates and expresses himself in a manner or mode that other human beings can recognize as human. As part of his thinking process, he seeks to explain things and to solve the many problems with which he is confronted in daily life. Culture X differs from

Culture Y mainly by reason of the fact that the people in them explain things and solve their problems in different ways. Thus to know the ways in which people explain things and solve their problems is in large part to know the culture.

The thought, thinking, or modes of thinking about the "Thought and Expression in Culture Learning" area seek to study and research are those which the people of the culture themselves regard as most formative, educative, and illuminating; those which, in the vernacular expression, make most sense to them; those which shape the culture and give form and structure to it; those which the people hear or read without questioning because it seems immediately clear and congruent to them; that which comes closest to stating the ideas on which the culture rests on embodying the values, feelings, ideals, and attitudes which it most respects.

Some relatively non-controversial examples of how a culture can be learned through a study of its thought and modes of thinking will be helpful here.

1. If one wants to understand The Peoples' Republic of China, he will need first of all to know the thought and writings of Chairman Mao and the commentaries on these by other Chinese writers. Mao's thought is seminal; it serves as a guide and model for much of contemporary thought in Mainland China in the same way that the thought of Confucius prevailed in Chinese culture for so many centuries.

2. It has been often and wisely said that most of Western philosophy is simply footnotes to Plato. Anyone wishing to understand Western thought and modes of thinking would have to be familiar with Plato's thought both for what it is in itself and for how it has influenced subsequent thinking.

3. Much of the best thought--or the greatest wisdom--of the different cultures of the world is crystallized for epitomized in the proverbs, moral tales, aphorisms, legends, mottos, epigrams and folk stories and ballads. Because they are frequently repeated and because they seem to fit so many particular situations and help to explain them, these sources and expressions of thought become in fact the thought in a culture for the majority of the people, that is, for all but the most independent and creative thinkers. (A very valuable source of this kind of classical and traditional wisdom drawn from many different cultures is U.N.E.S.C.O.'s Birthright of Man (1969).

In attempting to decide what the people of a given culture think, one is never completely certain of who the culture's most authentic spokesmen are. Even in the case of Mao's China, one cannot be sure of the extent to which Mao's thought is, in fact, the thinking of the Chinese people as a whole, although there is every indication that the vast majority of the Chinese people read and study Mao's works almost religiously. However, the fact that Lin Piao in his foreword to the second edition of Quotations from Chairman Mao, the so-called Little Red Book, exhorts the people to even further and closer study of Mao's thought indicates there may have been some falling off. Lin Piao writes (p. 13), "The broad masses of the workers, peasants and soldiers and the broad ranks of the revolutionary cadres and the intellectuals should really master Mao Tse-tung's thought; they should all study Chairman Mao's writings, follow his teachings, act according to his instructions and be his good fighters." Then too, even Mao's thought changes from time to time, and it is as a safe generalization for all cultures, including that of Mao's China, that some people within the culture disagree with the thinking of even its more powerful and popular thinkers and writers. A culture so monolithic that there are no dissenting and creative voices in it is almost inconceivable.

Yet there are a number of ways of getting at the basic thought of a culture short of running an opinion poll among all the members of the culture on all values, ideas, attitudes, and issues. Every culture has a number of people who speak for it and to it and who are key positions to influence and mould public thought and opinion. Among these are the teachers and professors, the priests and ministers, the politicians, the journalists and

broadcasters, the novelists and dramatists. Those whose ideas most influence the thought of a culture may be long dead, Buddha and Christ for example, or they may be the most contemporary of persons with a vital and compelling vision of what the culture should become. One comparatively easy way to study the thought of a culture is to sudy the text-books most used in the schools; these will contain ideas and values which the culture wants to make sure the young people of the culture do not miss or misunderstand. Another way would be to get to know the ideas contained in the books most widely circulated and most frequently quoted. Another way would be to determine which topics are most frequently discussed when people come together in their leisure time.

Similarly, anyone attempting to analyze the various forms of expression in a culture is never quite sure how well or how completely any particular form represents the feelings and aspirations of the people of the culture as a whole. On the one hand, some forms of expression are so extensively diffused among the people of a culture that they appear as a deep expression of the very soul or spirit of the culture. Flower arranging among the Japanese or singing among the Italians might be examples. Other forms of expression within a culture . . . bookbinding in the United States might be an example . . . while of value and interest to certain devotees within the culture, are too limited in scope to lead to any general interpretations of the characteristics of the culture as a whole. On the other hand, some architectural styles and certain dances, songs, tales, dramas and poems might express in a purified way some of the deeper ideas and values of the culture no matter how often used or how frequently referred to they might be. In this sense they are typical of the culture; they are qualitative rather than quantitative.

At any given time, as well, that which seems to be most expressive of a particular culture may well be in the process of transition. One example, perhaps oversimplified, of this phenomenon might be the automobile in American culture. It has been said that the automobile is a primary expression of American culture in that it represents the typical American's materialism, his love of the practical and the powerful, and his desire to be independent and mobile. The automobile in America, it is maintained, has become a symbol of prestige and status and not only a means of transportation. This may or may not be accurate. The point, however, is that in America the automobile, as an expression of the typical American's idea of what is most important in life, is changing rapidly. As traffic becomes more congested, parking more of a problem, and the air more polluted, the automobile seems to be less and less the typical American's expression of the epitome of the good life.

Culture Learning Through Analysis of Thought and Expression

Reference was made earlier to Jerome Bruner's statement that any body of knowledge can be represented to the learner in three different ways: the enactive, the iconic, and the symbolic. This is to say that one can learn a given body of knowledge in one of the three ways or in some combination of the different ways. All subject matters do not lend themselves to all three ways of learning. Taking a lead from Bruner's very evocative threefold distinction, it now remains to suggest how that body of knowledge called a culture is presented or represented to the learner, at least in part, through a study of the culture's thought and expression. It will be seen in fact that the culture learning which takes place through analysis of thought and expression falls mainly within the third way, that is, the symbolic.

Enactive: What Bruner calls the enactive mode of representation of a body of knowledge is not greatly different from the familiar notion of learning by doing. Indeed he defines the enactive mode as a set of actions appropriate for achieving a certain result. Thus, for example, field study or field experience in another country and certain kinds of activities within that experience are forms of culture learning in the enactive mode. One can in fact learn important aspects of a culture by living in that culture, or, if the expression will be allowed, by doing the culture. If the set of actions or behaviors, such as eating, speaking, working, playing, observing, and studying is appropriately

designed to achieve this result, the culture will be "learned," that is, the learner will come in time to be able to function more or less smoothly and effectively in the culture. He will encounter the same problems and he will acquire the same insights and sets of responses that have been acquired by the people of that culture. He will come to know how to interpret the many different clues governing daily behavior; he will come to understand the concepts and to appreciate the forms of expression which go to make up the culture. The enactive mode of learning a culture might include such things as going to the schools in the culture, working on its farms or in its businesses, sharing its celebrations, and generally adopting its manners, customs, and styles.

One of the principal shortcomings of the enative mode of culture learning flows directly from one of its principal advantages. The advantage is its quality of immediacy and direct involvement or, in other words, its first-handedness. The shortcoming is the amount of time it requires to learn a culture, that is, to be able to make powerful and precise generalizations about it, in this way. The more diverse the culture the longer it would take to come to know it through personal experience of it. One might, for example, experience over a period of time the entire culture of a small island community but one could not hope in a life time personally to experience all aspects of one of the larger and more complex cultures.

One adaptation of the enactive mode of culture learning that has met with considerable success is role playing, literally the acting out or enacting of certain scenes or episodes that are precisely structured to produce maximum learning.[1] One learns much, for example, about Culture X by learning how a typical member of Culture X is most likely to interpret a given situation and react to it. Certain crucial aspects of the culture, stripped of all unnecessary and extraneous detail, can be presented dramatically in simulated life-situations and the learner either observes or to the best of his knowledge actually plays the role of the member of Culture X. Role playing depends, of course, on someone else's having learned the cultue sufficiently well to create the scene and to know how a member of the culture would be most likely to act or react in it.

Clearly, the thought and expression of a culture do not lend themselves readily to the enactive mode of learning. One can observe the behavior of the people in a given culture and posit certain kinds of correlations between their thought and their behavior, but one cannot learn the thought or thinking of a culture by directly doing it. What the people of a culture think about man, about society, about nature, beauty, truth, goodness, why they think as they do, why how they express their thinking in certain ways in their art forms are matters more of insight, illumination, and understanding than of action, more of seeing than of doing.

Iconic: The thought and expression of a culture fall more within the iconic mode of presentation than the enactive, but even more within the symbolic than the iconic. Learning takes place through iconic presentation when the study or the learner is presented with such things as models, graphs, images, pictures, charts that represent a concept or an idea and that serve as aids to the understanding of the idea. These aids are not, of course, the idea itself any more than a picture of a tree is a tree. A globe, for example, is a good way of representing the earth but it neither defines the earth nor gives a complete concept of it.

In attempting to learn culture through the study of its basic thought one can often learn much and much more quickly if that thought can be given some form of iconographic presentation. One's effort to understand, for example, Plato's famous allegory of the cave in the Republic and to understand the system of logic out of which it was developed is greatly facilitated by a good diagram of the different component parts of the allegory. One is not learning the diagram for its own sake but for the sake of the concepts that the diagram represents. The art of model-building and iconography for learning purposes, in spite of the great progress that has been made, is still in its infancy. It may be possible to find much better ways of representing what the people of a culture think about such fundamental matters as love, suffering, death, hope, and man's place or role in the universe.

Many of the various forms of expression within a culture are iconic in nature. A good painting, for example, is an esthetic delight in itself but it also reveals to some extent what the painter is thinking about and how he feels towards it. Architectural forms also grow out of ideas and attitudes toward nature and out of thoughts about how men best relate to one another.

Symbolic: The thought and expression of a culture most clearly present the culture to the culture learning in a symbolic mode. We are here using the term in its widest sense. It includes, for example, the fact that the verbal and written language used by the people of every culture is symbolic, the word being one way to symbolize and express an idea. It includes, further, an analysis of the kinds of symbols used throughout the culture, in the highest forms of artistic achievement as well as in the creative life of the average person. Most particularly, however, it includes the fact that, for example, every novel and poem, the design of every building, and the visage of every statue is in the deepest sense a symbol. Man, in short, is a symbolizing animal and his thought and his artistic expressions are symbols of how he perceives, constructs, or interprets the world.

The way in which the people of a culture view the world, including the inner life of each man, the organization of society, and the realm of nature, is to a large extent encoded by the thought and expression of that culture. The culture's articulated thought and forms of expression are symbols of its deepest feelings and values. But the difficulties in interpretation are immense. For example, many of the most poignant experiences in life are inexpressible and ineffable, beyond the ability of even the most gifted people to communicate, either verbally or in any other way. Yet the culture learner is constantly engaged in seeking a deeper understanding of the code itself and of the range of its validity and applicability. Then too, every culture is complex and changing, a mosaic, and no one writer, whether novelist, historian, poet, or philosopher, and no one form of expression, whether the village hut or the Taj Mahal, encodes the culture in all its dimensions. The question also arises at all times as to whether even the most authentic spokesman for a culture symbolizes in his works the culture as it is or as he would like it to be.

There is a tendency among some thinkers to regard the scientific or mathematical formula as the highest, purest, and most effective form of symbolic representation. This tendency, of course, is not without some justification because this type of symbol--$E=MC^2$--for example--encodes and in some sense explains with power, economy, and even a elegance a certain phenomenon of the natural order. But scientific formulae are by no means the only form of symbolic representation. A great novel or a poem or a painting, for example, while it does not aim at scientific precision, can represent in symbolic form the insights, the values, and the sensitivities of the artist himself and of the culture of which he is a part. The fact that a novel, poem, or painting cannot be reduced to any simple objective formula does not in any way destroy its value as a symbolic source of culture learning.

Methodology and Future Research

"Thought and Expression in Culture Learning" is such a broad research area that it readily permits of many different approaches and methodologies. In fact no methodology, whether historical, philosophical, comparative, empirical, or any other is ipso facto ruled out. For example, Hajime Nakamura's (1964) important work, The Ways of Thinking of Eastern Peoples, written in part while he was a Senior Specialist at The East-West Center, is an historico-analytic study of the influences that gave rise to the present thought patterns of large numbers of people in Japan, India, China, and Tibet. As such, it is a magnificent source of culture learning; it has its own integrity based on what Nakamura was trying to achieve. As a general rule, moreover, it may be said that the nature of the particular problem or project will dictate the methodology to be used. If it should be decided, for example, to do a study of bridge-building as an expression of cultural values and priorities and as a key to culture learning, the very problem might

well suggest the most appropriate methodology. (In this case one might think of using Thomas Pope's famous A Treatise on Bridge Architecture, written as far back as 1811, as a kind of model. It contains a comprehensive study of the history of bridge forms prior to that time.)

One approach that is relatively recent in its theoretical orientation, that shows promise of leading to significant explanations and generalizations, and that emphasizes thought and expression rather than behavior as such deserves special consideration. This approach is used by those who are coming to be called cognitive anthropologists, although not all who like the approach are happy with the label. One of the broadest and most creative thinkers in this area is Gregory Bateson, who during his tenure as a Senior Fellow in the Culture Learning Institute, shared many of his pioneering ideas with us, his colleagues.

Stephen A. Taylor describes this approach in this way: "Cognitive anthropology focuses on discovering how different peoples organize and use their culture. This is not so much a search for some generalized unit of behavior analysis as it is an attempt to understand the organizing principles underlying behavior. It is assumed that each people has a unique system for perceiving and organizing material phenomena . . . things, events, behavior, and emotions. The object of study is not these material phenomena themselves, but the way they are organized in the minds of men." And, "Cognitive anthropology seeks to develop methods which can be used for discovering and describing these principles of organization." (Taylor, 1969, p. 3 and p. 11)

The connection between what the cognitive anthropologists are trying to do, both substantively and methodologically, and what we are trying to do in the "Thought and Expression in Culture Learning" area will be immediately evident. The unit of study for us, as well as for them, is the central idea and the most significant expression in a culture. Like the cognitive anthropologists, we who are exploring culture learning through a study of the culture's thought and expression seek to determine how the people of a culture find a rationale--or give order to what would otherwise be chaos--in the world in which they live. We are concerned with what the people perceive and what they perceive as meaningful in their perceptions, how they organize that which enters their conscious awareness, what they sort out and how they classify and categorize what they experience, how they process that which comes to them as information, what they use as the basis for accepting and rejecting ideational imput, and finally what they judge to be wise and what foolish. We study a novel, a painting, or an architectural style, for example, as a key to coming to know the culture's underlying principles of cognitive organization. Essentially, as one way of culture learning we seek to discover what the people of a culture think and why they think in that particular way and not in some other.

Perhaps without realizing he was doing so, Ward Goodenough stated the lietmotif of the "Thought and Expression in Culture Learning" area, in this way: "A human community, like any other natural universe in a state of near equilibrium, exhibits the statistical patterns chracteristic of internally stable systems, as with homeostasis in the living organism. Similar, but never identical events occur over and over again and are therefore isolable as types of event and patterned arrangement. Certain types of arrangement tend to persist and others to appear and reappear in fixed sequences. An observer can perceive this kind of statistical patterning in a community without any knowledge whatsoever of the ideas, beliefs, values, and principles of action of the community's members, the ideational order. The phenomenal order is a property of the community as a material system of the people, their surroundings, and their behavior. The ideational order is a property not of the community but of its members. It is their organization of their experience within the phenomenal order, a product of cognitive and instrumental (habit formation) learning. The ideational order, unlike the statistical order, is nonmaterial, being composed of ideal forms as they exist in people's minds, propositions about their interrelationships, preference ratings regarding them, and recipes for

for their mutual ordering as means to desired ends. And as an organization of past experience, the ideational order is a means for organizing and intepreting new experience." (Ward Goodenough in Spradley, 1972, p. 7)

Finally, it remains to mention some of the cross-cultural studies or inquiries we hope to be undertaking in the "Thought and Expression in Culture Learning" area in the years ahead. We will be, no doubt, relying in part on some of the sophisticated models and methodologies already found useful by the cognitive anthropologists, although most of these up to the present have been limited to such areas as ethnosemantics and socio-linguistics. At the same time we will be developing our own research techniques based on The East-West Center's problem-oriented, interdisciplinary, multi-cultural, and cooperating-team orientation.

One area which we plan to research is that of maxims and proverbs. On the premise that the maxims found in a culture and most frequently called forth will provide a key to the cognitive principles according to which the culture is organized, we will study the nature, the possible origin, the meanings, and the implications of certain maxims in the cultures selected for the study. We will attempt to discover how maxims serve the particular culture as a means of perceiving and categorizing reality and how they provide guides and maps both for behavior within the culture and for culture learning.[2]

Another research area is jurisprudence, the philosophy of law, or what might be called the thinking about the law in various cultures. Here we will be concerned not so much with the law itself but with the thinking behind the law. What are the organizing principles behind the statutes and the codifications of the law? To what extent do the laws prevailing in a culture reveal or reflect the deeper meanings and values of the culture? What kinds of laws are considered necessary, who makes the laws, and who administers and enforces them? The assumption is that the legal system or structure of a culture expresses basic thinking about the person and about society and that to come to know this thinking is, in part, to have learned the culture.

A third research area is architectural styles. The people of a culture, it is taken for granted, design and ornament their homes and public buildings in accordance with what they perceive to be their relationships with their fellowmen and the world of nature. The study will be exploring why it is that people of different cultures but living under approximately the same geographical and climatic conditions have arrived at vastly different architectural styles. We will be seeking to discover in what ways the family dwellings and the public buildings of a culture express in their very design the perceptions and the ideas of the people about space and land, about time and continuity, about social status, and about what is appropriate and beautiful.

The last area we have thus far projected for future exploration is religion. Religious belief or faith and religious observance in their many forms have been said to be the soul of any culture. We will be seeking to discover how coming to know the religious thinking and expression of a culture may lead to ways of learning the fundamentals of the culture. Among other things we will be seeking more precise data on how the forms of religious thought in various cultures address themselves to the ultimate, perennial, and mysterious questions of man's life and death and to suffering, injustice, and the quest for meaning and identity in the life of society.

FOOTNOTES

[1]Readers desiring further information on the role playing technique can consult Elms (1972), especially his chapter 6 [Editor].

[2]Dr. Walsh and I have discussed this project and agree that content analysis will undoubtedly prove to be a most valuable method. An excellent reference is Holsti, Loomba, and North (1968) [Editor].

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ISSUES CENTRAL TO THE STUDY OF THE INDIVIDUAL, LEARNING, AND CULTURE

RICHARD W. BRISLIN
RESEARCH ASSOCIATE
CULTURE LEARNING INSTITUTE
EAST-WEST CENTER

One of the prime research emphases within the "Cultures in Contact" area is the study of how individuals learn in different cultural settings. This emphasis, then, has close ties to traditional concerns with the psychological study of individual learning, but there is the necessary addition of "culture" as studied by anthropologists. Any combinations of the three elements, individual, learning, and culture is of concern, and attention has necessarily focused on only a few. We have been especially concerned with educational problems encountered by individuals in school systems that require behavior completely foreign to the students' background. For instance, in many Asian countries students are evaluated primarily on written work and, if they come to colleges in the United States, they find it difficult to work effectively in small group seminars where oral performance is highly regarded. We have also been concerned with training and orientation programs that help individuals from one culture become adjusted to the behavioral patterns of another culture. For instance, many Asian students find life in American college dormitories upsetting since they are accustomed to rigid rules (curfews, study hours, segregation of sexes), and these rules have been abolished over the last ten years in many American schools. However, after a few years (and perhaps with the help of a good orientation program), they become well-adjusted but then are expected to go home to a system incorporating the older, rigid rules. Such special problems of "reorientation" have received detailed attention.

Another concern is the factors that motivate people to travel outside their culture for long periods of time, as well as the types of learning that take place and the kinds of changes that individuals undergo. Stephen Bochner has completed a study of this topic, and some of the major findings are reported in the paper he has written for this volume.

In this paper critical issues central to these and other studies will be discussed in an attempt to point out some of the basic ideas and basic disagreements that scholars hold. Recommendations will be made, largely dealing with approaches to research and with indications concerning where breakthroughs are possible, though not yet attained. The purpose is to encourage thinking about the issues, many of which do not have enough of a firm research base to justify even tentative conclusions. To help avoid a dispersed presentation, most examples will center around learning in schools rather than the other topics mentioned above.

From Where Do Important Research Ideas Come? An Example

There are an infinite number of topics that a researcher can investigate. How are decisions made regarding what is important enough to devote time, effort, and sometimes large sums of money? The present writer is in agreement with Katz (1971) who writes that good ideas do not come easily. In the following quote Katz is speaking of experiments in social psychology, but his criticism can be applied more generally to a great deal of work in the social and behavioral sciences.

> If one examines the voluminous output of social experiments...one is struck by the paucity of interesting ideas and the prevalence of cheap ones. The experiment, no matter how ingenious, is not going to make much of a contribution if it is lacking an idea (p. 277).

One way to obtain interesting and important ideas is to analyze obvious problems that exist in one's surroundings. For example, Labov (1970) analyzed the puzzling problem that young Black children in the United States are often termed "non-communicative" and "non-fluent" by their White teachers in school. However, when these same children are among their peers outside of school, communication and fluency are striking and indeed verbal repartee is a desirable, status-giving characteristic. In a similar analysis, a group led by Cole (Cole, Gay, Glick, and Sharp, 1971) analyzed the difficulties encountered by the Kpelle of Liberia in schools and contrasted this with their skills at tasks outside of school. The verdict of "inadequacy in school" was often made by teachers, and yet the skills Cole tested outside of school (such as the estimation of volume) sometimes surpassed those of comparison groups in the United States.

Close examination of these and other learning situations prompted Cole to summarize a great deal of work in a short statement that will hopefully encourage further analysis. He will be quoted directly since, even though the work is recent, it has been widely read but misunderstood by some. Cole, during a presentation at the East-West Center in 1973, mentioned that he thinks of this as a theoretical statement:

> Cultural differences in cognition reside more in the situation to which particular cognitive processes are applied than in the existence of a process in one cultural group and its absence in another (Cole et al., 1972, p. 233).

This extremely important summarizing principle has many implications. It means that people in all cultures have skills, but situational characteristics are important in allowing the skill to be easily used. The Black children in the example studied by Labov have verbal skills, but the school situation, most often administered by people from another (White majority) culture, is not conducive to the elicitation of such skills. Similarly with the Kpelle studied by Cole: skills useful in their farming community do not transfer well to the school. The challenge for educational institutions is to take advantage of the skills already possessed by children to find means to use the old in learning new material.

Another implication is that competence cannot be judged from performance. That is, if a person cannot perform a task or do well on a test, this does not mean there is a deficiency in ability.[1] This implication contrasts with the normal inference that if a person does not perform well, then willy-nilly there is no competence or ability. The preferred interpretation, supported vigorously by Cole, is that the task itself or the situational nature of the testing situation may well be causing the poor performance. These situational elements include uncommon materials involved in the task, unfamiliar time pressures to complete the tast, presence of a nervousness-producing, high status "outsider" doing the testing, and so forth. Cole has used the research technique of redesigning the testing situation until the person performs well on the task, taking the original poorer performance only as a starting point. Sometimes this is a challenging procedure, but when successful it gives infinitely more information about the exact reasons and exact cues for good performance than the procedure of stopping immediately after the first testing. The cues that brought out good performance (such as cues that encourage

effective organization of information rather than rote memorization) can then be used in other learning situations.

In recent years, some of the cruelest writings in the behavioral sciences have been based on the exact opposite of the Cole procedure. The unfair conclusion is based on the premise that if members of culture A don't do well on intelligence tests (designed by people from culture B), then the A's must be less competent than the B's. People making this conclusion have neglected to take the necessary step of demonstrating that other situational cues are not causing the poorer performance.

A practical note must be added to the above discussion. Often times a cross-cultural researcher will have a fine idea that he would like to study, but often he will not be able to do so. He may want to study certain learning problems encountered by elementary school children, but the administrators of the school may want the researcher to study other problems. Or, limitations of time, lack of space, broken promises by others, pressures from political authorities, and so forth, will force a compromise in the research plan. Such compromise-research is more likely to occur than research that encounters no change from the initial formulation to the completion stage. Neophyte cross-cultural researchers are often surprised and upset at the inevitable changes than ideas must undergo during actual work in another culture.

What Should Be the Focus of Time and Effort?

Given the large number of social problems competing for public attention, an individual researcher can be concerned with only a small number because of time and effort. If people become involved with too many activities, their efforts are dissipated and all output becomes mediocre. The question to be answered, then, is: "where should a person's limited assets be put--what should be the emphasis?" The example to be discussed is education in developing countries, with special reference to experiences in New Guinea.

One emphasis would be to test individuals and to accept for schooling those who score highest on the test. This has been done in New Guinea, notably with the development of the Queensland Test (McElwain, Kearney, and Ord, 1969). The test is a good example of attempts to be fair to members of various cultures. For instance, the test does not have a language component and indeed can be administered through non-verbal mime, thus avoiding disadvantage to the child who speaks a language different from the tester. The test is given to children of a certain age range, and those who score above a cut-off point are allowed to enter school. Those who score below are not allowed. Some readers will see similarities between this testing program and the tests given in Britain and Japan to adolescents which determine future educational opportunities. The use of tests for this purpose is also prevalent (although to a lesser degree) in the United States, since high school juniors and seniors have to score high on the Scholastic Aptitude Test to be admitted to highly-select colleges.

Critics of testing for these purposes argue that the tests are not good enough. They point out that certain people who score low and are rejected should really be admitted to school and would do well. The popular opinion that intelligence tests measure intelligence perfectly is just not true. Reasons for scoring low (alluded to in the last section) include nervousness, illness on the day of testing, unfamiliarity with testing materials, etc. Another criticism is that a preoccupation with testing takes attention, effort, and money away from better goals, such as universal education, curriculum improvement, or teacher training.

Other scholars have placed emphasis on curriculum development, designing materials that will especially motivate children of different cultures. James Ritchie has been involved with social science curriculum development for junior-high and high school level classes in

the Pacific (New Guinea, Palau), and he reports on his work in this volume. One outcome is a migration game in which players (the students) learn history and geography by reconstructing migration and settlement patterns throughout Polynesia, Melanesia, and Micronesia. The game seems to this writer to be especially involving and educationally challenging at the same time. The use of such new materials presupposes teacher training with which Ritchie has also been involved.

Finally, some scholars believe that the major gains will be made if the occupation of teaching is upgraded. At the present time, certainly in the United States, elementary and high-school teaching is a low-status profession (Charters, 1963) and it is well-documented that college students majoring in education are among those of lowest intellectual ability compared to students majoring in other disciplines (see Getzels and Jackson, 1963, p. 570 for the various sources of evidence). The writer remembers, when he was in the 12th grade (18 years old), a discussion held with his parents concerning career plans. A desire for a high school teaching career was expressed, but this was met with, "You can do so much better than that!" Colleagues in Japan also report a decrease in the status of teachers over the last decade. The scholars focusing on the teaching itself recommend that massive programs be started to upgrade the profession by means of higher salaries, recruitment of able students, increase in the expectations of satisfactory work in college courses, and so forth. Note that this is undoubtedly the most difficult of the three approaches discussed since it demands change in the place of teachers in society. This difficulty is probably behind the reason why emphasis has been placed on the other two, testing and curriculum development.

Unfortunately, there is not enough solid information to make an unbiased choice as to which is the best approach or which combination of testing, curriculum development, and occupational upgrading would best improve a country's educational system.[2]

Are There Ethical Concerns in Doing Research?

The amount of written material concerning ethics in research with human subjects has been voluminous in recent years (e.g., Kelman, 1968, 1972; Lear, 1966). Among others, concerns center around the invasion of people's privacy without their free and informed consent, the possibility that people might be harmed as a function of being in a research project, and the fact that humans are treated as "subjects" who have no emotions or feelings, much like rats and monkeys.

Let us examine a research topic about which different scholars would probably agree that ethics are a problem, and follow this with an example about which most would agree that there is little or no problem. Assume that the topic is the type of advice people receive concerning feelings of guilt about their past behavior. The researchers are especially concerned with how the advice might facilitate or hinder new learning opportunities. Almost all readers will agree that the following poses severe ethical problems: members of the research staff pose as Catholics wanting to confess their sins. They enter confessionals in various churches, read from a standard list of sins, and then record the priest's advice. The priest is unaware of the research project and behaves toward the staff member as if he were a person making an honest confession. This is not a hypothetical example but was a technique actually used by Valentini and DiMeglio (reported in Newsweek, 1973).

In contrast to the above, most readers will agree that ethical concerns are, at most, only a very minor concern in this example. Individuals are invited by members of a research team to cooperate in a project. The potential participant is told exactly what will be asked, especially what personal information would be gathered. He is told how the information would be used and the possible practical benefits for others. He is guaranteed anonymity and is assured that his responses will be grouped with others and reported by use of statistics that summarize individual responses. He is given time to make a decision (with no pressure) whether or not to participate, is promised a write-up of the project

whether or not he participates, and is paid for his time if he does continue with the project.

One of the major difficulties with ethics is that there is a large gray area between these two extreme examples. For instance, a number of investigators have recorded people's behavior in public places, summarizing individual responses to make generalizations. The people whose actions were recorded were unaware that they were in a study. The present author (Brislin, 1971) has recorded whether members of different ethnic groups sit together, separately, or with cross-group interaction in a public cafeteria. The purpose was to summarize results by statements that could predict this one type of intergroup interaction. Other researchers (Bryan and Test, 1967) have studied people's generosity by analyzing donations to a Salvation Army Pot as a function of whether or not someone else (the researchers' accomplice) had donated less than 20 seconds earlier. Results: seeing a "model" donate increased subsequent giving from others who saw the model, a finding that can be interpreted in terms of individual learning. This study may seem ethically innocuous, especially when the researchers emphasize that all donations were actually given to the Salvation Army. However, the people engaging in the behavior did not have a choice as to whether they were in the study or not. They did not behave with the knowledge that their act of giving or not giving was being recorded. Further, there was no way in which the researchers could obtain the names of participants so they might have the project explained to them and receive a copy of the results.

Analysis of such gray areas has caused a real change in the behavioral sciences over the last five years. As McGuire (1972, p. 236) points out:

> ...it has become the style within the house of intellect to express so stridently [the] disquiet regarding other people's ethics that the uneasiness has become hard to ignore even for those who had long been accustomed and quite reconciled to living the unexamined life.

In defense of workers toiling in these gray areas, McGuire (p. 237) goes on to point out a reemphasis in Western thought "...movingly expressed by writers such as Kierkegaard, Sartre, and deBeauvoir...that the decision not to act is an act that may itself be morally reprehensible." The generalization to research, of course, is that not doing a study should be contrasted ethically with doing it.

Although there is no clear-cut solution, there is a good deal of advice. Summarized, the general guidelines are to obtain participants' consent whenever possible, to discuss with a number of colleagues any potentially objectionable technique or method, to weigh carefully the gains of a research project against the costs to participants, and to study different proposed ethical codes (e.g., Cook et al., 1972) meant to guide decisions of this nature.

What is the Best Approach to Research

The most frequent answer to questions asking which of any number of research approaches or methods should be used for best results is "a combination." The feeling is that no one approach is inherently better than another in generating useful and important hypotheses, and that "multiple methods and approaches" will advance knowledge faster than the use of only one (Campbell and Fiske, 1959). Three methods commonly used in the analysis of learning and culture are (1) theoretical analyses, (2) generalizations from findings in one research area to another, and (3) data gathering techniques. None is "better" for all purposes, although there is the feeling among many (e.g., LeVine and Campbell, 1972) that choices between competing theoretical positions will be made on the bases of empirical data, the third method to be covered.

Theoretical analyses start with a small number of assumptions and then develop them so as to encompass explanation of large segments of human behavior, such as the reasons behind the formation of societies. For example, Roheim (1943, p. 100) wrote:

> Civilization originated in delayed infancy and its function as security. It is a huge network of more or less successful attitudes to protect mankind against object-loss, the colossal efforts made by a baby who is afraid of being left alone in the dark.

As Levine (1973, p. 49) pointed out, however:

> Roheim never presented the logical argument that might have connected such statements with common sense and endowed them with plausibility. He seemed to delight in making uncompromisingly flat statements that would convince only those who already agreed with him (emphasis ours), and he apparently felt that operating within the Freudian theoretical tradition he had no need to construct a systematic theoretical formulation of his own. In consequence, his reductionist position has never been taken very seriously by anthropologists.

Social and behavioral scientists must make their positions so clear that their theories can be disproved. If a theory predicts links between certain variables, and researchers cannot find such links in their empirical studies, then the theory is not strong and will eventually be replaced, refined, or discarded. Of course, the rather extreme example from Roheim used here is not typical of all theoretical analysis, much of which is excellent (examples of learning theory can be found in Hilgard and Bower, 1966).

A second approach is to take findings from one, sometimes seemingly distant field and to apply them in another. Psychologists interested in individual learning often work with animals such as the white rat, and it is easy for an outside observer to wonder why. One reason is that these psychologists are developing learning principles that they hope will be generalizable to a wide variety of settings, and they work with the rat because of the close control they can have over their research. Logan (1972) has presented this fascinating example of dominance and submission in rats that may have wider application. The laboratory situation is that two rats are in a box to which electrical shock can be delivered. During the time a light is turned on, the rats can avoid the shock if one of them turns a small wheel, an easy task to learn. Within each pair, one is a submissive rat and the other is dominant.

> When the programmed shock arrives, one of the rats turns the wheel, and it is predictable which rat it is most likely to be. It is the rat that has been judged independently to be the submissive member of the pair. But don't jump to conclusions. It is not the case that the dominant rat "forces" the submissive rat to do the work; if anything, it is quite the opposite. The dominant rat actually may attempt to prevent the submissive rat from turning the shock off. A large dominant male rat may hold a small submissive male by the head and keep him from getting to the wheel. The dominant rat is standing on the hot grid himself; he "knows" the wheel has to be turned to get the shock off, but he will not do it himself and interferes with the submissive rat's doing it. And then, when the submissive rat finally turns the shock off, the dominant rat frequently aggresses against him (p. 1059).

Logan goes on to make the summarizing statement that organisms will subject themselves to painful stimuli to display their dominance. The human generalization made is to the marine sargeant who takes his men out on night drill into cold, miserable, swampy areas. He subjects himself to the same misery as his men while showing his power to dominate. Logan continues:

> It would be so easy for a dominant rat to push a submissive rat out of the way and say, in effect, "Don't worry about it, I'll take charge." It is both fascinating and terrifying that he does not (pp. 1059-1060).

Some readers will be uncomfortable and will label this generalization from rats to human behavior as "far-fetched." However, Logan is simply elucidating a possibility about dominance in social behavior. Whether or not the finding explains a portion of human behavior will be answered only after extensive research. The contribution of the laboratory study with rats was to suggest an important problem and to stimulate thinking.

A third approach is to gather original data relevant to a hypothesis that covers a small part of human behavior's scope. This hypothesis can either be derived from a theory or it can constitute preliminary groundwork to the building of a theory. As mentioned above, this approach is not "better," but it is often cited as the method by which the merits of competing theories will be established. The empirical methods involved include experiments, interviews, questionnaires, tests, systematic observations, case studies, content analyses, and so forth. We have an example in this volume as Masanori Higa analyzed data in terms of borrowed words to support his hypothesis about the influence of one culture on another. A second example of original data gathering is the Salvation Army pot study covered under the ethics section. Graduate training in the behavioral sciences almost always includes extensive training with this method, and it is in fact the major component of this writer's background.

Can the Behavioral Sciences do Anything About Significant Problems?

The answer to this question is not universally in the affirmative among behavioral scientists. There are often-heard rumblings from researchers, moderate in political philosophy, who admit that, "We have a great deal to be modest about" in our efforts to alleviate significant problems through programs designed by behavioral scientists. Many conservative intellectuals, as pointed out in an article by Hacker (1973), feel that not enough is known to even suggest ameliorative programs. Presenting their feelings, Hacker states that their arguments might go like this:

> Arson, looting, and criminal violence are expressions of the human condition, at least as it manifests itself in this country at this time. To assume that we know enough to diagnose causes (derelict housing, bad schools, unemployment) or to bring about cures (jobs, slum clearance, better education) is a monumental delusion. The conservative prescription is to bring criminality under control. Force has been a corollary of conservative thought: how else do you deal with perversity? (p. 13)

Liberal intellectuals have also examined the application of findings from the behavioral sciences; note the disagreement with the above quote in the following. Examining reasons for the failure of many innovative programs like Head Start, Caplan and Nelson (1973) argue that a major reason has to do with the causes of problems as seen by psychological researchers. Such researchers see problems in terms of person-oriented variables. In schooling, examples would be low intelligence, lack of motivation, no need to achieve, and little ability to delay gratification. Concern with these person-variables takes attention away from situation-oriented variables such as poor school systems, slum residency, political considerations favoring the status-quo, and lack of opportunity for self advancement. Caplan and Nelson sampled the work of researchers who published on Black (Negro) problems in psychological journals and found that 82% dealt with person-oriented problems, often leaving the impression that these were the causes of Black misfortune. The argument is not that person-variables are unimportant, but rather that the overwhelming bias in favor of these studies causes neglect of real situational effects and reinforces the popular stereotype that "those people brought it on themselves." The bias also suggests political action aimed at individuals (those Blacks doing poorly in school) rather than systems (the school or community itself).

This bias is undoubtedly due to the training of most behavioral scientists in which emphasis is on how to deal with individuals, not situations. Given an opportunity, the psychologist will naturally try to use the skills learned during training. This is an example of what Kaplan (1964) called "The Law of the Instrument;" give a child a hammer and suddenly everything needs hammering.

What can be done now that this bias has been identified? This writer feels that progress will be made if individual scholars are open about the shortcomings of what their disciplines cannot explain. This is not the case now, as reputations are made by writing articles extolling the merits of a theory rather than pointing out flaws or trouble spots. The tactic is not to leave oneself open to criticism, and the result is an arsenal of defenses against rebuttal from people who might constructively criticize a theory. The theories have consequently not been given a thorough working over prior to application in a real-problem setting. This tactic was discovered by the writer early in his professional career. He was on a panel presenting methodological guidelines for cross-cultural studies, and one panel member praised the merits of his own techniques but severely attacked others. After, in private, this same person gave words of advice to the writer on "how to play the game" in seminars of the sort just completed. The advice was to use the tactics outlined above.

Constant defense of a theory without admission of flaws is partly due to insecurity feelings within the behavioral sciences as "new" or "not real" sciences. The writer recently heard Dr. Francis Crick, Nobel prize-winning molecular biologist, speak and was surprised that Dr. Crick was completely open about what recent research can and cannot explain about chromosomes. The lead of the established sciences in admitting unresolved issues should be followed.

Summary and Recommendations

Much ground has been covered, and yet several themes transcend the various questions and examples. In addition, these themes constitute major points of departure within the Cultures in Contact research area.

1. Situational variables have not received as much attention as they should, having been relegated to second place by the emphasis on person variables. The importance of situational variables was explained in the examples of schooling among American Blacks and the Kpelle of Liberia, the place of teachers in society, and the possibility of applying research findings to significant problems. While situational variables are admittedly more difficult to define and measure, the prediction is that they will receive much more emphasis now that psychologists (e.g., Caplan and Nelson, 1973) have recognized their importance and previous under-emphasis.

2. Testing is not an exact science, and if behavioral scientists can communicate with others that tests do not measure personality and intelligence perfectly, then education will be improved. This topic was touched on in describing the Labov-Cole work on situational effects, and in the discussion on "focus of effort." Too often, people taking tests place too much faith in negative results, damaging their self-concept when in actuality the tests are at fault. Too often, the results of tests determine a person's opportunities for life. Test results should be one part of a guidance-selection program in any school, not the total program. The mistake of placing all faith in tests is widespread. Unfortunately, a complete analysis of this topic would require a paper twice as long as this one. Interested readers are referred to various (quite readable) articles in Psychology Today that have appeared over the last five years (e.g., Cattell, 1968; Rosenthal, 1968; Garcia, 1972; Mercer, 1972) for more detailed presentations.

3. Controversy between behavioral scientists should be made explicit, as was attempted in the section presenting the three approaches to improvement of educational systems. This recommendation was also made when the possibility of social action by behavioral scientists was explored. Careful analysis of all possible reasons for a finding, not just an investigator's preferred interpretation, is bound to advance knowledge faster than elaborate defense of only one position.

4. The amount of reading a behavioral scientist must do to remain abreast of current developments and to make a contribution is vast. This was implied when the many findings put together by Cole were reviewed, and in the presentation of ethical concerns. Summaries such as the Annual Review of Psychology, Psychological Bulletin, Annual Review of Anthropology, and the Review of Educational Research help, but reading must not be centered solely on a specialty. The writer was on a panel discussing cross-cultural training recently, and a person brought up a study on training. The response from another panel member was that "the _____ study isn't cross-cultural!!" This was true, but the study had many ideas and concepts which had to be modified ever-so-slightly to have direct application to the discussion. A person can over-define an area of inquiry such that closely-related, helpful material is excluded. Logan's example of dominance in rats (to elucidate a possible dominance relationship in humans) is admittedly a large jump, but these and smaller jumps are very helpful in analyzing human learning situations.

FOOTNOTES

[1]The writer's linguist friends tell him that the competence-performance distinction is an old idea in that discipline. Apparently, it is a good idea that has only recently received the attention it deserves from psychologists and other behavioral scientists.

[2]In private discussions with James Ritchie, he has suggested the following: "Perhaps the greatest single factor in status upgrading would be to improve teacher skills by more modern methods of in-service training, especially those which emphasize a behavior management or technology approach." The suggestion Dr. Ritchie makes involves, as one example among many, deciding which of a child's behaviors will be considered desirable in a given classroom, and then reinforcing these behaviors with tokens that can be later exchanged for privileges. Other behaviors are ignored. The article by Phillips and others (1973) can be consulted for more information on one such application of behavior management or technology. Proponents of the method claim excellent results. Application to situations involving cultural variables have been rare, and so the writer can only recommend further study of the method rather than immediate acceptance in the type of situations under discussion in this paper.

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"Models for cooperation in educational fields," by Willis H. Griffin

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THE MEDIATING MAN AND CULTURAL DIVERSITY

STEPHEN BOCHNER
UNIVERSITY OF NEW SOUTH WALES
SYDNEY, AUSTRALIA

International Education and Foreign Aid

International educational exchange programmes such as the Fulbright scheme, the East-West Center, or the Colombo Plan are no longer the sacred cows of world diplomacy that they once were. Increasingly, the assumptions, aims, and outcomes of 'educational aid' are coming under scrutiny. The donor countries that provide the scholarships and university places, the recipient countries that provide the students, the universities that provide the training, and the sojourning students themselves have all in recent years begun a re-assessment of cross-national education.

I have used the term 'educational aid' deliberately, because there is little doubt that international educational exchange belongs properly within the framework of foreign aid, despite claims to the contrary. Furthermore, the term 'exchange' is somewhat of a misnomer, because most of the traffic is one way. The usual pattern consists of a student from an 'underdeveloped' country receiving a free education in one of the more developed nations. Even the East-West Center has not been able to completely break this tradition, despite the Center's 'half-way house' location in Hawaii, the field trip to Asia that all American students undertake, and the two to one ratio of 'foreign' to American students.

The traditional assumption underlying educational aid has been that the student will acquire useful skills abroad which are in short supply at home, or not being taught there. It is expected that after returning, the overseas-trained graduate will apply the foreign schooling that he received, toward the economic and social development of his country. This assumption seems to be shared by recipient countries, who welcome a flow of returning graduates from overseas as being in their national interest.

Justification for Educational Aid

Enlightened Self-Interest

Donor countries, particularly those with difficult taxpayer associations, justify the expense of educational aid primarily in terms of enlightened self-interest, and point to such potential outcomes as friendly individuals in influential positions abroad, an increase in export markets as a correlate of economic growth, international peace and prosperity

through mutual understanding, stable governments, and in the days when it was fashionable to kick the communist can, halting the spread of pernicious Marxist influences.

Alleviating Suffering

Frequently, humanitarian reasons are also advanced, such as the need to train specialists whose work will fill hungry bellies, eradicate disease, and provide shelter for the homeless. There is probably a large element of self-interest in this kind of giving also, since it has the effect of reducing the discomfort and guilt that any well fed person experiences when he finds himself in the company of people whom he interprets to be starving. At the same time, I would not wish to disparage this motivation for providing educational aid. There are a great many people who are totally sincere in their empathy with the sufferings of those in less fortunate circumstances. In any case, even if charitable giving is mainly based on alleviating the collective guilt of the wealthier countries, this is still a positive sign that on a world wide basis man feels that he ought to be his brother's keeper.

Both the self-interest and humanitarian themes of educational aid have been very persuasive with governments and public opinion, and have resulted in huge sums of money and resources being allocated to international educational exchange throughout the western world.

Intellectual and Personal Growth

Sometimes there is a lone cry in the wilderness that the main function of education is to furnish and expand the minds of individuals, and that therefore international educational exchange schemes should have the same goals, and be evaluated on the same criteria as education in general. From this perspective, the Fulbright, East-West Center, Colombo and other programmes succeed to the extent that they produce students who excel in their chosen academic field. Considerations such as making friends, influencing governments, developing economies, or alleviating hardships are, on this view, largely irrelevant, or at best a kind of extra bonus if achieved. This is not a popular view, and is seldom used as an argument in appearances before congressional or parliamentary committees investigating the budgets of exchange programmes. This is not to say that the view could not be justified on pragmatic grounds, such as the argument that in the long term the world community benefits in proportion to the number of educated people that exist, irrespective of their location on the globe. Governments however, are usually more interested in shorter term projects with more immediate pay-offs, and one must not be too critical in this regard, because that is what Governments are elected to do.

The Culture Learning Institute at the East-West Center seems to at least partially subscribe to the intrinsic model of educational aid, through the emphasis that the Institute places on learning about cultures, particularly in its language, literature, cross-cultural contact, and cultural identity research programmes. However, in the Institute's publications and pronouncements one can usually also find an expression of the hope that culture learning will lead to greater mutual cross-cultural understanding and cooperation, indicating that even CLI wants to have a bet each way on this issue.

In the next section of this article I want to examine the three criteria by which educational aid is evaluated, enlightened self-interest, the alleviation of suffering, and the intellectual development of individuals respectively. At the same time I will be examining the main arguments that have been used in critiques of exchange programmes. The various strands of the discussion will, I hope, lead to the view that the intrinsic criterion of educational excellence should be given more weight in the evaluative matrix than has been customary. As a corollary of that conclusion, some of the more traditional aims of educational aid would have to be modified, an issue that is also taken up in the

following pages. At various times in the article I will be referring to a CLI research project which looked at some of the intrinsic outcomes of an educational sojourn abroad, and in which I also tried to develop a theoretical model for describing the intellectual growth of individuals engaged in culture learning.

Attacks on Exchange Programmes

"They Don't Work"

The main critics of international educational programmes have been people who subscribe to the view that the purpose of cross-cultural education is to develop under-developed countries, expand spheres of influence, and alleviate human suffering through the introduction of modern technology. From this point of view there is no doubt that existing programmes contain many deficiencies. A short list would include the following problems: the 'brain drain', where students either refuse to return home, or emigrate at the earliest opportunity after re-entry; students who come back with the 'wrong' skills, e.g. who study law or English literature when what their country urgently needs are engineers and agricultural scientists; returned students who cannot apply scarce and needed skills because the local scientific infrastructure is inadequate to support the kind of high level work that they were trained for; 'wrong' and ill-equipped students who are selected for overseas scholarships because of family influence or for political reasons, thus denying a place to a more able but less well connected student; 'ungrateful' returnees who not only develop an unfriendly feeling toward their host country, but on the contrary come away suffering from imaginary or real slights that turn these students into powerful and bitter enemies of the country that educated them; returnees who use their overseas-based skills to widen the gap between the rich and the poor in their countries, and thereby invite the very political instability that they were supposed to counteract; and other similar 'scandals' (as one press commentator put it), that to a greater or lesser extent negate the officially stated aims of sponsored international educational exchange.

If I were to subscribe to the view that educational aid should result in economic development, I would still not be too perturbed by the catalogue of problems that were listed in the previous paragraph. Most of the deficiencies are, in theory, rectifiable, and as expertise in administering educational aid is being built up, the faults can and will be kept down to a reasonable level. Attacking educational aid as a waste of money because of 'poor' results has had the effect of gingering up the system, and there is no doubt that most schemes have become more 'efficient' in their operation as a result.

"They Work Too Well"

In the last few years, educational aid has come under attack from another, and an entirely different, quarter. This opposition has come mainly from people whose values are diametrically opposed to those of the developers and technologists. The core of their argument runs as follows: The world is becoming increasingly homogeneous culturally. The destruction of indigeneous cultures, and their replacement by a Western life style is undesirable and deplorable. International educational exchange programmes contribute significantly toward the process of homogenizing the globe. Therefore, in the long term, educational aid is a negative influence in world affairs, and a pernicious one to boot, because of the false promise of being a panacea for all of the ills of mankind. The reader who shares the writer's predilection for a good paradox will immediately recognize that what is being asserted is that international educational exchange programmes become more destructive as their effectiveness increases in terms of their stated goals and aims.

In later sections of this essay, I propose to argue that cultural homogeneity holds certain dangers for the future of mankind, and that consequently cultural diversity is a positive goal to strive for. I will then try to show that although educational aid does

frequently contribute to global homogenization, this is not a necessary outcome, but depends on the nature of the programme in question, and that certain kinds of programmes are quite capable of promoting cultural diversity. The essay ends with a re-assessment of the criteria used for evaluating educational aid.

Exporting Cultures

It is unfortunate, in my opinion, that a good deal of heat and emotion is usually aroused whenever the question of curbing the further expansion of western influence is being discussed. Terms like 'ad-mass' society, 'coca-cola culture' and the like, have a nice ring to them, but they tend to distract from making a critical analysis of the phenomena referred to. I am not saying that we should stop pointing to the absurdity of coca-cola as a replacement for coconut milk, tinned fish as a preferred substitute to the freshly caught product, or electronic guitars displacing the gentler sounds of traditional instruments. Nor should we close our eyes to such painful sights as Bangkok converting its clongs into highways, Tokyo becoming the smog capital of the world, and in dozens of cities throughout the world, the destruction of temples, parks, and viable communities in favour of sterile concrete high rise structures that blot out the sun and dampen the spirit. One could go on, and show how the requirements of tourism are in the process of destroying the natural habitat of indigenous peoples acorss the globe from Mexico to Hawaii to New Guinea to Nepal; how the requirements of big power politics spawn wars in Southeast Asia, nuclear fall-out in the South Pacific, and a guns before butter mentality that is wasteful of scarce natural and human resources. Nor should one leave out the requirements of international big business, which turn forests into wasteland, beaches into sand mines, countries into markets, and people into consumers. The list of cultural take-overs could continue, and arouse justifiable anger, resentment and anguish about what is happening to the world. There is however, a danger of over-reacting, and of obscuring one basic point which can be summed up as follows: The Asian street scene that appears so picturesque on a post card, may have quite different connotations for the permanent actors on that particular stage. Indeed, one can generalize the proposition by asserting that no one, Western hippies included, would literally want to return to the way of life of their ancestors remote or near.

What is it that makes life today better than it was in the 'good old days'? The simple answer is that it is the very same forces that produce the catalogue of world disasters that were listed in the previous paragraph--namely modern technology and its derivatives. The harnessing of electricity is a case in point: electric light is more effective than burning candles, but electric power lines are unsightly and power stations can cause smoke pollution. However, power lines can be put underground, and smoke control is technically feasible. But, environmental protection costs money which might perhaps be better spent elsewhere. The obvious point is that it is not technology per se, but the uses and application of technology that are at issue. In other words, the real discussion is about values, and the translation of these values into action. The current world wide debate on ecology is evidence that such a discussion is already under way in the general realm of man-environment relations. The ecological movement will undoubtedly moderate the form of technological development in the future, at least in those centres where there exists an educated, enlightened and politically effective public.

It is, in my opinion, inevitable that modern technology will continue to spread throughout the world. And since the use of technology inevitably modifies the kind of life that people lead, to some extent the world will become a less diverse and a more homogeneous place. The crucial question however is whether the introduction of Western technology necessarily also leads to the introduction of a Western style of life, and to the destruction of indigeneous customs and folkways. Unfortunately, the posing of this question leads to the utterances of vague generalities and platitudes, due to the absence of an adequate theoretical model of cultural diffusion. In the next section I would like to examine the concept of world homogeneity, through the extension of a theoretical framework that has been useful in an understanding of national inter-group relations.

Intra-National Differences

Very few societies are completely homogeneous, and therefore most individual societies can be thought of as a microcosm of the global network of aggregations. With a very few exceptions, the lack of internal homogeneity is reflected in a numerical imbalance between members of the different groups that make up that society. Generally, the cultural identity of a society is defined by its majority group, and this group is usually quite distinguishable from the minority sub-groups with whom they share the physical environment and the territory that they inhabit. With some notable exceptions, the members of the majority usually control the sources of power, influence, and material wealth. Often, majority group members enjoy a higher status merely by virtue of membership in that group, and in many cases minority members appear to accept the legitimacy of such a social order.

Usually, but not always, there are visible physical differences that clearly identify the group to which a particular person belongs, and in racist societies these physical differences carry with them implications of superiority or inferiority as the case may be.

Three societies that fit into the above scheme are the United States, Australia, and New Zealand: each country contains a dominant white European majority, and a Negro, Aborigine, and Maori minority respectively.

All human societies are continually changing, with varying degrees of rapidity, both overall and with respect to individual aspects of a culture. In the field of majority group--minority group relations, four different kinds of processes can be postulated.

Genocide

Genocide occurs when the majority group kill all members of the minority group in their midst. There are many examples of attempted genocide in ancient as well as recent history, indicating that this method has some apparent attraction as a means of dealing with minority groups. Advocates of genocide usually argue that the minority groups being eradicated are not really human beings. This argument is not shared by those individuals against whom the process is directed. There can be nothing more terrifying than belonging to a cultural group that is being systematically and ruthlessly exterminated by a numerically or technologically more powerful horde.

Assimilation

Assimilation occurs when a minority group gradually adopts, or are forced into adopting, the customs, beliefs, folkways and life styles of the dominant majority. After a few generations of assimilation, minority members become culturally and physically indistinguishable from the main stream of national life. Thus a policy of assimilation results in the virtual disappearance of the minority culture. Advocates of assimilation may or may not realize that the policy implies a superiority of the majority culture relative to the minority, often to the extent of denying any worth in the culture being absorbed. Individuals undergoing assimilation do not find the process psychologically satisfying, because of connotations of inferiority, self-rejection, and in extreme instances, self-hatred.

Segregation

Segregation is a policy of separate development. The impetus can come from the dominant majority, as was the case in the southern parts of the United States, and is the case in Sourth Africa; or the minority groups can actively seek separatism, with demands

for separate states, cultural enclaves, special schools, land tenure based on ethnic background, reserves, sanctions against intermarriage, boycotts, and other similar devices.

Whether a system of segregation could lead to cultural preservation is probably an academic question only, because in practice segregation usually does not work, whether the enforced or the self-imposed kind. The reasons are many, but basically they revolve around the theme that the world is an interdependent place, particularly for people who live in close physical proximity to each other. Apartheid cannot work in South Africa because the dominant minority need a large labour force to man industry, and separatism will not work in the U.S.A. because too many Blacks want to participate in the fruits of a wealthy industrial society. Thus advocates of segregation do not realize that their policy is largely impractical, and that it can only lead to conflict in the end.

Individuals who have been segregated by the majority do not find the process psychologically satisfying, because they perceive their freedom to be curtailed; self-segregated individuals may find their status initially exhilarating, with a new found sense of pride, identity, and worth. It remains an empirical question whether such enthusiasm can be sustained, in the face of the self-imposed but nevertheless real shrinkage in the economic, social and cultural opportunities available. In any case, the undercurrent of hostility and the siege mentality implicit in a self-segregated situation, are unlikely to be psychologically healthy for the group or individuals espousing such a life style as a permanent arrangement.

Integration

Integration occurs when different groups maintain their cultural identity in some respects, but merge into a super-ordinate group in other respects. The term 'integration' is sometimes wrongly used by the layman as interchangeable with 'assimilation', but the technical sense refers to a situation of cultural pluralism. In fact, cultural pluralism exists widely, but only within the dominant sector of most communities. All the different special interest groups that exist in a complex society, attest to the existence and feasibility of cultural pluralism. Differences in form of worship, political philosophy, recreational preferences, occupational activity, and many other aspects of life all coexist within the broader framework of a unified national identity and a shared set of broad values, rules, and goals. In a multi-racial society that operated on the principle of cultural pluralism, different racial groups would maintain their distinct identities and cultures, within a framework of equal opportunity and mutual tolerance. It remains an empirical question whether such societies can be created, but there is no doubt in my mind that individuals living in pluralistic settings would find the experience psychologically satisfying, because of the range and variety of opportunities and life styles that would be available. People would not need to deny their own heritage, as those in the process of assimilation have to do; nor would people be forced into accepting the accident of their birth, as is the case with segregated groups. Rather, people would be free to choose the life style that suited their particular personalities and inclinations. Such individuals would be able to become their own contemporary selves, rather than act out a role imposed from the past, or a reflection of future aspirations.

In summary, the various arguments that have been presented, indicate that on a national level, inter-group differences are likely to disappear under programmes of genocide and assimilation, at considerable cost to individual members of the minority groups, and to the detriment of the society at large. Segregation is unlikely to accomplish anything except inter-group hostility, conflict, a divided society, a restriction of personal freedom, and in a few individuals a shrill self-image based on a stance of opposition and protest. Only in a pluralistic society where group differences are a subject of pride, interest, and mutual respect, will cultural diversity survive and flourish. Under such

conditions, all individuals, from whatever group in the society, would have a greater range of life styles from which to sample and to choose, and thus a greater prospect of personal fulfillment.

The advantages of a pluralistic society seem obvious enough, but the sad fact is that more often than not, intergroup differences arouse anxiety and fear, and these in turn lead to acts of competition, hostility, prejudice and violence. The conditions under which inter-group conflict and/or cooperation flourish, have been the subject of extensive research, and are not reasonably well understood by social psychologists.[1] But it is another matter to apply these principles to the actual reduction of conflict in the world.

Inter-National Differences

The preservation or elimination of differences between nations can be encompassed within the same four conceptual categories that were used in the analysis of intra-national processes. Countries can attempt to physically wipe each other out, and with the advent of the nuclear age, such a strategy unfortunately has a reasonable chance of succeeding. Countries can attempt to take over weaker nations not by force, but through imposing their economic, technological and cultural systems. This is sometimes done from the best of motives--in the name of progress, improving the lot of mankind, or creating symbiotic economic systems of mutual advantage. At other times the reasons are less lofty, and are merely the twentieth century version of creating colonial empires.

Countries can ignore the forces of history, and isolate themselves behind self-imposed barricades. Sometimes, the collective majority will blackball a member of the club, as in the current case of Rhodesia. Finally, countries can live in pride in a pluralist world, with idiosyncratic life styles that suit local conditions, and provide global variety, within an overall framework of mutual respect, tolerance, and support.

I don't think that any rational arguments can be advanced for either genocide or segregation as solutions to current world problems. Assimilation, however, has had a long tradition, and considerable backing from a variety of quarters. For centuries, Western based missionaries, with a firm belief in the superiority of their moral, spiritual and cultural teachings, have been converting and "civilizing" the "heathen savage" in the "darkest" corners of the globe. The loftiest of motives were involved to justify this proselytism, and missionaries could generally rely on financial and moral support from a wide spectrum of public opinion. Similarly, justification for the expansion of the British and other Empires was based on a mixture of economic advantage and a genuine moral belief that the subject peoples were like children who had to be taught how to live in a civilized (i.e. Western) manner. The phrase "The white man's burden" captured the essence of this philosophy, with its implicit value judgment that all things "native" were inferior to the way that things were done at "home." Again, I would not wish to condemn out of hand the work of missionaries, colonial administrators, and the like, because many of these people were completely sincere, and often achieved a great deal of good, particularly in such fields as public health and education. However, an inevitable concomitant of the penetration of Western influence, was a lowering of the status of indigenous ways. Western attitudes, objects and values achieved an elevated status out of all proportion to their intrinsic merit, and these attitudes are still evident today in many of the ex-colonial countries.

Modern instances of the "White man's burden" are more subtle than the overt activities of the missionaries and vice-roys, but not less numerous, nor less intrusive. Every time a Western expert shakes his head at all those cows running around loose in India while people are suffering from protein deficiency, the burden lies heavy on his shoulders. When we deplore what we would call corruption which in, say, Indonesia is an accepted way of doing business; when we look askance at the "waste" of man power implicit in the Thai custom of young men serving as monks for several years; when we

calculate the increase in grain production that might result from mechanizing agriculture in Taiwan; when we think of the loss of efficiency that occurs for one month each year in Pakistan because of the custom of fasting during Ramadan; these and many other examples are instances of cultural chauvinism.

Cultural Chauvinism

I would define a cultural chauvinist as one who believes that his culture is superior to other cultures, and I would hazard the guess that most of us, in varying degree, are prone to denigrate that which is strange and unfamiliar. However, the only way in which one could justify a belief in the superiority of one's own culture, would be if one could present evidence to support such a view.

Although people usually have all sorts of reasons for preferring their own cultures, I am not familiar with any empirical evidence on the relative efficacy of different cultures to promote the good life. It is possible that this issue may not be researchable in the strictly empirical sense, although the economists have attempted to do so with measures such as the gross national product, median incomes, per capita consumption of electricity, and the like. But these days economic development is no longer being equated with the good life. Indeed, many experts are arguing that an overemphasis on material progress creates problems for human beings, such as the rat race syndrome of mental stress, ulcers, and early heart disease. The psychologists, in whose territory this issue is squarely located, have yet to come up with an acceptable index of human happiness.

In the absence of any hard evidence regarding the superiority of one culture over another, we need to guard against making erroneous value judgments. As our discussion has shown, there are no better or worse cultures, only different cultures. Probably the best antidote to cultural chauvinism is a familiarity with a variety of cultures, or at least some knowledge about a variety of cultures. One of the functions of the Culture Learning Institute is to impart such an awareness of other cultures and life styles.

Our discussion has shown that cultural assimilation can only be defended if one is prepared to accept the superiority of one culture over another. But as we have seen, there are no logical grounds for creating a hierarchy of cultures, and in denying cultural chauvinism we have also taken away the main justification for cultural assimilation. However, there is still a need to provide some positive grounds for cultural pluralism as a preferred model for international relations. This will be done in the next section.

Cultural Pluralism Defended

Earlier we said that cultural diversity is desirable on the grounds that such pluralism provides a variety of different life styles for people to choose from. Even cultures that contain material poverty, high death rates, and other undesirable features, may at the same time exhibit aspects that are not available in more "advanced" societies. People may prefer to put up with some of the inconveniences of living in a "backward" country, in order to enjoy a life style that they consider to be valid. Outsiders often have difficulty in comprehending this, and many Western aid projects have foundered because of the lack of cultural awareness on the part of the foreign "experts."

Up to now we have been asserting that cultural pluralism is desirable because it provides variety. The perceptive reader will no doubt have noted that this is not a very compelling argument, since it is largely based on the value judgment that diversity is a good thing in itself. The argument, can, however, become empirically based if we accept an analogy between cultural and biological systems. Nature in the biological field never puts all its eggs in one basket. Species develop and differentiate as a response to environmental changes, and animals and plants have emerged that can survive and flourish

under almost any conceivable condition of temperature, altitude, atmosphere, and the like. If some major disaster were to befall the world, there is a good chance that somewhere in all that diversity there would be some organism that could survive the holocaust and begin anew.

Arguments by analogy are never completely satisfactory, but they do point to aspects of a situation that might otherwise be ignored. The extension of the biological argument to the cultural field suggests one important feature that has so far not been directly considered, namely the future fate of mankind under changing ecological conditions. The biological evidence suggests that cultural diversity would ensure a variability in approaching the future. By contrast, a single world culture would tend to standardize the approach to solving problems, and if the solutions that emerged from that culture turned out to be the wrong ones, then mankind would be in real trouble. But if there are several alternatives current at any point in time, then the survival of at least part of the species is made more likely.

On a small scale, cultural diversity already exists within Western society. People who have rejected economic growth, technology, and consumer goods as indices of the quality of life, are beginning to experiment with alternative life styles. There is an element of irony in the fact that these so-called alter atives are often very similar to the "primitive" and "savage" practices that the ancestors of the present day practitioners were stamping out in the heydey of colonialism. In general, "alternate" living is accorded only grudging acceptance by the dominant majority, but some of the sub-cultures are almost certain to survive. There is hope, therefore, that on a world wide basis, there will be a similar survival of alternate ways of construing reality.

In summary, cultural genocide and segregation do not recommend themselves as means of reducing conflict in the modern world. Arguments in favour of assimilation are mostly invalid, since they are really value judgments in disguise that reflect an ethnocentric world view. Only cultural pluralism can be rationally defended, on the twin grounds of providing the world with a variety of life styles to suit different individuals and circumstances; and the greater chance for the survival of mankind that cultural diversity implies in providing the world with a variety of solutions to the problems of the future.

Technology and Cultural Pluralism

Now that we have established a theoretical model for the notion of world homogeneity, and presented arguments in favour of cultural pluralism, we must ask again the crucial question that has prompted this inquiry: Will the inevitable introduction of Western technology to the Eastern world necessarily also lead to the introduction of a Western life style, and to the concomittant destruction of indigeneous customs and folkways? Before answering this question, we must take one final brief excursion, into the realm of specifying exatly what is being introduced, preserved, or destroyed.

Cultures are very complex, and one could not even begin to do justice to such a vast topic in the present article. Cultures are also very diverse, so that there is no Western culture as such, just as there is no Eastern culture--India is as different from Indonesia as Ireland is from Italy. However, for the purposes of the present argument I am prepared to risk making the following generalizations regarding differences between cultures broadly classified as Eastern, and cultures broadly classified as Western.

The Family

Family structure and family obligations are a major cultural differential. In Eastern cultures the family structure tends to be extended, people are housed in compounds or other communal arrangements, and a person's primary and overriding obligations are

towards his family. Furthermore, the family provides the model for all other relationships with society, so that for instance the political systems and commerical enterprises in these societies are based more on patronage and reciprocal obligations, than on principles of equity, equal opportunity, or individual personal gain. In Eastern societies, vertical relationships tend to be personal, and people tend to be motivated by collective aims rather than individual inducements. There is restricted competition within the extended family setting, which may at times encompass a large clustering of social networks. People will go to considerable lengths in meeting their mutual family obligations, even to the extent of breaking some formal law, or incurring personal loss or danger in response to the demands made on them by a relative. Competition is reserved for conflict between families, tribes or clans, and is one reason why stable, centralist governments are difficult to maintain.

By contrast, the Western family is nuclear, housed in a unit that is physically separated from other relatives, and arouses far less loyalty and obligations. Personal gain and advancement are valued, and everyone competes against everyone else for power, material wealth, and individual prestige. The social and legal systems value and underwrite equal opportunity, equal access, and personal independence. Vertical relationships tend to be impersonal and job or task centred.

The Psychological Function of Material Objects

One often hears it said that materialism distinguishes Western from Eastern cultures. I think that this is a very misleading distinction, because many people take it to mean that Westerners are interested in money and Easterners not, and that Easterners are spiritual whereas Westerners do not believe in non-material beings. This is clearly nonsense, since one could hardly think of anyone more interested in material gain and profit than the Eastern businessman, nor anything more spiritual than a Catholic mass. The distinction is not in terms of valuing or not valuing material objects, but the use that material objects are put to. Western man holds material objects in an intrinsic regard, whereas Eastern man uses objects in an instrumental way to express influence or achieve personal relationships. This also explains why Western societies are characterized by accumulation, whereas in many non-Western societies the accent is on the distribution of goods.

If we take a closer look at the accumulation-distribution distinction, we can see that what is really happening is that in both cultures accumulation occurs between families, and distribution within families. The greater apparent emphasis on distribution in the East is due to the much greater number of people subtended by the concept of family, which in some societies might include the whole population of a village or a district.

Finally, this view sheds light on the different attitudes to private property that distinguish Eastern from Western societies, with objects having a personal value in the West in contrast to being an expression of collective reciprocity, as in the East.

The different psychological functions of material objects in Eastern and Western societies are closely linked with the different family systems characterizing the two cultures.

Time

Some broad differences in time perspective can also be discerned. Western man's life is controlled by schedules, time slots, and punctuality. In Eastern cultures these needs are not as pressing.

Another difference relates to attitudes to the past. Custom, tradition, the way that it was done before, are relied on far more for guidance to action in the East, unlike in the West where the new and the different are greatly valued.

Nature

Finally, Eastern man considers himself to be part of nature, whereas Western man sees himself as pitted against nature. Natural resources are there to be exploited for the greater benefit of mankind, according to the Western view, whereas the unity of man with nature produces a different attitude to exploitation in the East.

The reader will have noticed that I have not raised the issues of wealth and strength, which are often used to differentiate East from West. I believe that wealth and strength are misleading notions in the realm of cultural differences, for two reasons: Firstly, in terms of traditional indices, there are many rich or potentially rich Eastern countries, and many poor nations in the West. Secondly, wealth and strength are subjective concepts, and usually defined from an ethnocentric point of view. It is therefore to beg the very question which is the topic of this essay, if one were to assert, for instance, that the United States is richer than India because there are more cars per family in Chicago than in Calcutta.

Nor has urbanization been used as a criterion for differentiating cultures, since there are many large cities in the East, and many small towns and villages in Western countries.

In summary, what is being introduced, preserved, or destroyed in the process of cultural diffusion, are family relationships, man's relationship to nature, his attitude to material objects, and his time perspective. We are now in a position to ask if the introduction of technology will necessarily wipe out the existing Eastern cultural forms in these four areas of living.

Will Western Technology Destroy Eastern Culture?

The short answer is that technological diffusion will not necessarily destroy traditional cultural patterns, but that such destruction is quite likely, unless there is a much greater active concern with cultural survival.

I would like to borrow yet another concept from general psychology to illustrate my meaning, this time from the field of industrial psychology. In many factories, offices, mines and other work settings, there is frequently a conflict between the technological and social requirements of the system. For instance, the efficient mass production of motor cars usually requires individual workers to be spaced at regular intervals along an assembly line, doing highly specialized, repetitive and boring jobs. By contrast the psychological requirements of the employees would be better served if groups of people could work together on moderately complex and varied tasks. The conflict can be resolved by modifying the assembly line to permit social contact and variety; or one can attempt to modify the worker through incentive payments, cash bonuses, and threats of dismissal if his dissatisfaction is reflected in the quality of his work.[2]

The analogy holds in respect to the cross-cultural diffusion of technology. Technology can be exported in its original, unmodified form, and the social systems of the recipient countries allowed or actively encouraged to adapt themselves to the machine systems being introduced. Alternatively, the imported technology can be modified so as to fit into the existing cultural patterns and arrangements. In practice, some compromise accommodation is usually arrived at, but too often the technological requirements are given greater weight than is necessary. And yet it is entirely feasible to run an industrial society which is compatible with traditional family loyalties, a respect for nature, and

even a disregard for fixed time schedules. However, there are serious psychological obstacles that prevent a genuine marriage between traditional culture and modern technology. Some of these obstacles will now be discussed.

Psychological Obstacles to Cultural Preservation

"It Won't Work"

Many quite sincere people believe that you cannot run a technological enterprise with an Eastern value system. The belief is mistaken, and whoever holds it is merely displaying his ignorance of the principle of socio-technical balance described in the preceding section. It also ignores a good deal of evidence, an example of which is a study conducted in Fiji which showed that urbanization and monetization do not necessarily lead to nuclear families as is so often assumed.

Traditional Cultures are "Primitive"

Traditional cultures and life styles often have a low status, an opinion held not just by outsiders, but frequently shared also by the inhabitants of non-Western societies. Minority group self-disparagement is a fairly general phenomenon, but all that it signifies is that minority group members have learned and absorbed the attitudes of their oppressors. The same process seems to be at work when cultures that differ in their technological complexity, come into contact with each other. The feelings of cultural inferiority that develop as a result of such contact, have no objective basis, but are a result of mistakenly equating technological superiority with a higher order of civilization. In fact, of course, the alleged superiority of technological cultures is simply a confidence trick that originated in colonial days, and justified and facilitated the spread of Western influence across the globe. It is time that we exposed this fraud, and disposed of it once and for all. Indeed, educational programmes in culture learning are designed to do just this, through their detailed study of different cultures, and the emphasis that is placed on cultural relativism.

"Time is Fast Running Out"

A recurrent theme in aid circles is the need for rapid industrialization and development. I believe this to be a Western ethnocentric obsession, and quite detrimental to cultural preservation. Slow change is much more likely to allow for the sort of adjustment between social and technical forces that will result in the best synthesis of the two systems. Instant, rapid change is likely to demoralize, disrupt and ultimately destroy existing structures and institutions.

"Who is Going to Pay for It?"

It is much easier to convince congress or parliament of the need to build a dam, than of the urgency to subsidize village dance groups before the art dies out. The gist of the present paper has been an attempt to refute the fallacy that dams are absolutely more important than corroborees.

Apathy

How to help cultures survive has not been a very major interest in the past. Recently there has been an increasing realization of the need to actively promote the survival of cultures under threat of assimilation. It is encouraging to note that the

United Nations have several studies under way, and that the Culture Learning Institute of the East-West Center is about to embark on an ambitious programme of cultural preservation in the South Pacific.

Mediating Men and Women

The biggest obstacle to cultural preservation is the lack of sufficient people who can act as links between diverse cultural systems. In another publication I have called such an individual a 'mediating man.' Some attributes of the mediating man are a belief in the common unity of mankind, cultural relativism of values, cognitive flexibility, membership in international and trans-national social networks, and supra-national reference groups. Such a person can be described as a multi-cultural individual, in contrast to the bi-cultural person who as a working knowledge of two cultures only, and the mono-cultural individual who is merely familiar with the culture of his birth. Genuine multi-cultural individuals are very rare, which is unfortunate because it is these people who are uniquely equipped to mediate between the cultures of the world.

Evaluating Educational Aid Re-Assessed

At the beginning of this paper I listed the three criteria by which educational aid is evaluated--development, alleviation of suffering, and individual intellectual growth. I set out to show that educational excellence has been underated as a goal, and am now in a position to conclude that argument. I believe that cultural pluralism is desirable. I believe that technological diffusion is inevitable and in many cases desirable. Probably the only way in which technological innovation and cultural preservation can be reconciled is by a process of socio-technical adaptation, with most of the adaptation occurring on the technological side. Finally, this whole process can only be implemented if there are sufficient people available who have a thorough understanding of the nature of the problem.

Up to now, most educational exchange programmes have aimed at training a student in a practical skill, and as a by-product making him to some extent also a bi-cultural individual. These students return home with some understanding of the culture of the host country, but they often over-react by uncritically absorbing all the values and techniques that they learned during their sojourn abroad. From the point of view of a developer, such a student is an outstanding success, and a tribute to his programme. The cultural pluralist, on the other hand, would consider this student a disaster.

The Role of the Mediating Man in Cultural Pluralism

The kind of socio-technical adaptation that I have been advocating critically requires a large and steady supply of mediating men and women. The implication for the architects of international educational aid is to emphasize basic education in the arts, social sciences, and the humanities. The goal of cross-national education should be to free the minds of people from their ethnocentric and mono-cultural shackles. The developmental criterion, by which the success of an exchange programme is measured in terms of the degree of development that is stimulated in recipient countries, should play only a minor role in the evaluative matrix, since development out of cultural context leads to undesirable cultural homogenization. Thus the critical criterion becomes the educational impact on the student, measured in terms of the extent to which alumni of international educational exchange programmes become multi-cultural individuals capable and desirous of exercising a mediating role in a culturally diverse world.

The evaluation of exchange programmes has been a thankless task in the past, because the stated aims of international education are usually vague, ill-defined, and often internally inconsistent. An outcome of the present analysis of educational aid could be to make programme evaluation easier, through the specification of well defined objectives

(intellectual and personal growth); and by providing a theoretical model that outlines what the desirable end product should be (mediating men and women). The present analysis could also be used as a basis for curriculum construction, another area of international education that is in a state of disarray.

Although the stated aim of the East-West Center is to create multi-cultural individuals, a recent major research project conducted by the author, in which alumni were interviewed in their home countries, showed that the East-West Center has only been able to achieve this objective in a very limited way. The majority of the alumni who participated in the study were very successful in terms of the usual exchange programme criteria, but their sojourn aboard was mostly bi-cultural. In other words, these students learned a good deal about the American way of life, but in the main missed the opportunity to learn about the many other cultures that are also represented at the East-West Center. The reason lies in the emphasis that the students, the home reference groups, and the sponsoring institutions all placed on obtaining a degree. It seems that the pressing needs of academic achievement, in conjunction with compatriot obligations and personal concerns did not leave much time, energy, or incentive for multi-cultural contact and understanding. What extra-cultural contact there existed, was centred on those individuals, inevitably Americans, who could help the students with their academic work, teach them English, or assist them in their negotiations with the various authorities that loom so large in the life of a foreign student.

After returning home, the pattern of the lives of these alumni reverted to being basically mono-cultural, upper-middle class, materialistic and conservative. These results are not surprising, in view of the social group from which the students were selected, the sort of training that they obtained while abroad, and their subsequent careers at home.[3]

It should be emphasized that the student just referred to dealt with alumni who were at the East-West Center in the early days, before the introduction of the current problem-centred approach. A repetition of the study in five years time may well yield results that are quite different. Even so, one of the implications is to re-examine the content of the curricula being offered, the criteria by which students are evaluated, and the sanction systems that shape the behaviours of all of the participants in the enterprise, which includes both staff and students.

Conclusion

The aim of the present paper has been to argue that the curricula, criteria, and sanctions of international education should all converge on the focal area of intellectual and personal growth, cross-cultural awareness, and cultural relativism. It is these precious skills that are so badly needed, because their unique contribution is to help steer mankind through a middle course, where the benefits of technology can be gradually extended to all human beings, without at the same time creating a bland, homogenized and inflexible world.

FOOTNOTES

[1]Some important sources summarizing knowledge of this subject are: Collins, B. Social Psychology. Reading, Mass.: Addison-Wesley, 1970, especially chapters nine and ten by Richard Ashmore; Sherif, M., and Sherif, C. Social Psychology. New York: Harper and Row, 1969, especially chapters 11 and 12. [Editor].

[2]An especially readable source is: Brown, J.A.C. The Social Psychology of Industry. Baltimore, Md.: Penguin Books, 1954. [Editor].

[3]Dr. Bochner is referring to his publication, The Mediating Man: Cultural Interchange and Transnational Education. Honolulu, Hawaii: East-West Center, 1973. The methodology of the study involved extensive interviews with 69 Fulbright and East-West Center alumni from Thailand, Pakistan, and the Philippines. These people were living in their home countries at the time of the interview and reflected on their thoughts and feelings prior to, during, and after their overseas sojourn. In the original publication Dr. Bochner cautions against overinterpretation many times. Likewise, his statements (page 35 to 36) here based on his report should be taken as hypotheses about the effects of overseas study rather than as facts. Further research by Bochner, myself, and others will examine these hypotheses. [Editor].

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ON CROSS-CULTURAL ORIENTATION TECHNIQUES

GREGORY J. TRIFONOVITCH
SENIOR PROGRAM OFFICER
CULTURE LEARNING INSTITUTE
EAST-WEST CENTER

This paper will deal specifically with cross-cultural orientation techniques used by the author in the last eight years with American personnel who were preparing to assume duties and responsibilities in Micronesia.

Basic Assumptions

The first basic assumption was that the orientation was not an end in itself, that is, personnel were encouraged to not feel that once the orientation was over, then enough would be known about Micronesia. It was merely the beginning of a process which would continue throughout the duration of a person's overseas sojourn as well as a beginning of a process of continuing to learn how to learn about one's own culture and the other cultures which the person would encounter. It is so often the case that a person who attends a rather extensive orientation program is misled to believe that as a result of this orientation he has received all the knowledge and skills needed to cope with a new environment. Thus, he proceeds to the new area full of confidence in his newly acquired ability and knowledge and begins immediately to "assist" those islanders, who, in his belief, have long awaited his arrival.

The second assumption is that there are natural linguistic and cultural barriers built around different cultural groups, but that many people who have lived in only one culture do not recognize this fact. The purpose of the orientation was not to tear down or circumvent these barriers but to create an attitude within the person to accept his own barriers as well as to learn to recognize the barriers of the other culture and develop a healthy attitude towards these boundaries. Those of us who have lived in Hawaii know many Hawaiian loan words which we have incorporated in our own English language. One of these words which is frequently used is "kuliana," meaning one's own private domain or "turf." The old Hawaiians divided their land and households by building short lava rock walls separating the different households. These enclosures were called kulianas. They served the purpose of identifying one household from the other as well as establishing the identities of the different groups involved. It is interesting to note that the battles, wars and conflicts which the Hawaiians fought were not between households which were separated from each other by the "kulianas" but between islands and between neighboring villages that had no man-built barriers between them. The custom would support the old proverb which we have used for so long: "good fences build good neighbors."

The third assumption is that culture is usually more effectively learned on the affective level rather than the cognitive level.[1] Thus, the orientations stressed mostly the affective presentation of new situations first and then later relied on more absorption at the cognitive level. Thus, less emphasis was placed on intellectualizing and more on feeling and doing. This report will be a composit picture of the six programs with which the author has been associated.

Participants

The 600 participants in this program were mostly American educators (and their families) in their thirties who had had several years of teaching experience and who had not been outside the continental United States. They were all bound for teaching and educational administrative assignments in the islands of Micronesia.

Staff

The orientation staff were composed almost entirely of native Micronesians from the various island groups or districts. They served as cultural consultants and language teachers. There was also a small group of Americans who have had experience in overseas living and had become somewhat cross-culturally sophisticated.

Duration of the Orientation Program

The duration of the orientation program was from two to three weeks.

The Orientation Site

Three different sites were used: rural Oahu, Molokai, and Moen (Truk district). Generally, the conditions were somewhat more primitive than what the participants would find at their assignment posts. The orientation sites were located on the beach or very close to it. The buildings were very crude and living accommodations were very simple. The site also provided the participants with an element of isolation and separation which would serve as a prelude to the new environment which lay ahead of them.

Language Learning and Language Orientation

Language is one of the "kulianas" which needs to be respected. The participants spent at least three hours a day learning the language of the people with whom they would be working. The first objective of the language program was to assist the participants with a psychological adjustment due to the fact that they would be working on an island where the language is a foreign language (to the participants) and English is learned as a second language by some of the inhabitants.

Americans often have an unconscious attitude that the world needs to learn to speak English. This attitude reveals itself in such statements as, "They don't even speak English there," a statement made by a visitor who had just returned from Taiwan. Or, "I know how to teach them English. I taught mentally retarded children in the states before I came here." Hence, many Americans who worked in Micronesia felt that the Micronesians were somewhat inadequate in their mental development because they were not able to speak English. In order to illustrate and help overcome this attitude in the Americans, the Micronesian staff at the orientation were instructed not to use English with the participants during the first three days. The Micronesian staff members pretended not to know English at all, or at least very little. This immediately plunged the participants into a completely foreign environment where communication was virtually

impossible without a dependence on an interpreter or some sort of a sign language. The participants began to experience the agony and misery of trying to learn a new culture and gain new knowledge and new skills without having the advantage of the most used medium of communication--language.

Soon the participants began to realize that they needed to establish some means of communication in order to be able to adjust to the new environment. However, it was very interesting to note that very few of them chose to learn one of the Micronesian languages. Instead, most of them launched on a campaign of teaching the "natives" English. Informal language classes were heard throughout the orientation campsite. One heard such statements as "This is a coconut"--"co-co-nut." "This is sand"--"s-a-n-d." "My name is George"--"G-e-o-r-g-e," etc. The level of frustration in communication continued to mount and the participants realized that they were indeed in a completely foreign environment. They began to feel that they were the foreigners. Nevertheless they continued to try to convert the "natives." One American lady who roomed with a Micronesian female staff member, after two days of relentless and vigorous attempts to teach the Micronesian lady English, expressed a note of glee and triumph when she reported her experience with her Micronesian roommate after asking "What time is dinner tonight?" Of course, the Micronesian had pretended not to understand. The question was repeated a second time louder and slower, "What time do we eat tonight?" Again, the Micronesian pretended not to understand. With the third attempt the American proceeded even slower and louder and added a few gestures. She pointed to her watch, to her mouth and to her stomach and then to the dining area. At this time the Micronesian pretended that she understood and answered by spreading the five fingers of her right hand to indicate 5 o'clock. The American then with great glee and relief expressed "Now, you're beginning to catch on." The whole incident, of course, infuriated the Micronesian roommate who was about ready to disregard all her pretenses of not being able to speak English and to reprimand the American for the insult. However, in the spirit of the orientation philosophy she managed to contain herself and to proceed normally.

A few participants chose to ignore the situation completely. They figured that if language was going to be a barrier, then it would be absurd for them to attempt to either learn the local language or to teach English to the Micronesians. Instead, they subconsciously banded together in a small group and proceeded to enjoy the delights and pleasures of their new environment by themselves.

At the end of the third day the "non-English speaking" Micronesians revealed their true identity and their excellent command of English. This revelation took place at an evening party which was given basically to boost morale and establish esprit de corps. The coordinator toasted a drink to the Micronesian staff. The Micronesians, in turn, accepted the toast graciously and one remarked in English, "It's about time somebody toasted for me." The American participants were pleasantly surprised and delighted to discover that the Micronesians with whom they would be working in the future did speak English and had already exerted great effort in learning the language.

The second objective of the daily language learning program was to provide the new participants with an opportunity to experience the difficulties of learning a second language. This was done so that they would be able to empathize with their Micronesian students who would be not only learning English but also learning other subjects in English.

The third objective was to introduce the participants to modern techniques of foreign language instruction. The participants had to realize again that in their new environment English is a foreign language and must be taught as a foreign language.

The shock of these techniques proved to be very effective in changing the attitudes of the Americans about the ability of the Micronesians to speak English. However, it did not eliminate the psychological block which many Americans have that languages are very difficult to learn and that is not really necessary to learn a foreign language since most

foreigners want to learn English anyway. Many of the participants became very effective teachers of English in their new posts in Micronesia, but unfortunately, very few continued to learn the local languages.

Introducing Participants to Some Basic Cultural Values

There were several basic cross-cultural objectives of the projects. In the first place, since one's own culture is learned subconsciously, the objective was to help the participants and the Micronesian staff become aware of their own cultures first. One of the methods used to achieve this goal was group discussions. The topic, such as family systems, was given by the project coordinator. Immediately the American participants wanted to know about family systems of the Micronesians. However, the Micronesians, as prompted, reversed the question and asked the Americans to tell them about their own family first. This, of course, put the burden of proof on the participants who had to investigate and verbalize their own cultural patterns. Then the Micronesians compared their culture with the Americans, beginning with the similarities and concluding with traits which were exclusively unique to their own cultures.

Following such a discussion during an orientation on the island of Truk, the participants visited the nearby villages and observed Trukese households and their patterns of interaction and then returned to the camp for more discussion of their observations. Through this technique some of the participants were able to delve very deeply into their own culture as well as into the new culture. Some were able to discover such intricacies as family member loyalty priorities. In an American nuclear family system the priorities of loyalties are first, spouses to each other; second, parents to children and children to parents; and third, siblings to each other. However, in a Trukese extended family system the hierarchy of family loyalties show first, siblings to each other; then children to parents and parents to children; and thirdly, spouses to each other. This was, of course, a profound discovery which not only affected their understanding of Trukese society but also influenced their mode of operation in the new school system.

Another technique used to create an awareness of cultural differences was to shock participants and to ask them to verbalize the effects immediately. For example, when it was discovered that many of the women participants were wearing either mini-skirts or very short-shorts, it was the responsibility of the project staff to familiarize all the participants with the body tabu systems of the Micronesian society and to make them aware that thighs are considered a tabu part of the body and are not displayed publicly. Our first inclination, of course, was to verbalize this fact to the participants and to acquaint them on a cognitive level. However, a technique on an affective level was chosen instead. During a group meeting when everyone rested on the grass listening to the cultural consultants, a female staff member appeared before the group to give her talk dressed in her village attire which was grass skirt with no top. After she addressed the group we discussed the reactions of the participants to this scene. Some of the comments were: "It wasn't necessary for you to do this. We could have waited until later to discover it for ourselves." "This was really great but I was too embarrassed to look." "I really wanted to gawk but my wife wouldn't let me," etc. We also discussed the nonverbal reactions to the scene, such as the shy peeker, the supposedly disinterested investigator, the nonchalant observer, etc. After the situation was thoroughly discussed, we mentioned to the group that the Micronesian men in the camp were also experiencing the same reactions, thoughts, and feelings by having to look at the tabu parts of the American women--the thighs. This knowledge was thus internalized on the affective level and the Americans immediately equated the breast in our society with the thigh in a Micronesian society.

Another technique we used was to encourage the Micronesian staff to operate in a predominantly American oriented environment but in a Micronesian manner. This is very difficult because for over 30 years the Micronesians have lived with Americans and have learned to behave in an American manner when with Americans. However, we made every attempt to put this technique into practice. One of the Micronesian staff members who

held language sessions on the grass next to the beach interrupted his language patterns by blowing his nose in a Micronesian manner. He placed his thumb on one nostril and blew very sharply through the other nostril, clearing his nose on the grass. At first, this was tolerated, of course, by the American participants, but later some became very disgusted, and finally one of the braver members in the group approached the Micronesian teacher and explained to him the effects of this unsanitary method of blowing his nose. The Micronesian immediately apologized and then requested that they demonstrate to him the way an American would perform the same function. This was done by one of the Americans who pulled out a clean handkerchief from his pocket. Immediately, the Micronesian reacted "And you carry that stuff in your pocket all day long?" What better way could the Americans learn that even matters of sanitation are culturally based!

The cross-cultural aspects of the program also sought to assist the American participants in overcoming their erroneous illusion that the Pacific Islands were an idyllic paradise where the natives live a very relaxed, lazy way of life. To do this we designated one day in the orientation as Micronesia Day. During this day the participants were to learn to live in a rural Micronesian fashion. This, of course, was accepted by all the American participants with great glee and indeed they looked forward to a really delightful experience. However, their pleasant expectations were interrupted when they discovered early in the morning that there was no electricity and no running water. Their morning routine was vastly interrupted and hampered by the absence of two basic elements which are taken for granted in their culture. They had to flush toilets with sea water carried in buckets from the ocean. The chores of shaving and washing required that water be carried from a central source. They discovered that a great deal of time and energy were used just to perform the basic, normal morning routines. Later they discovered that breakfast would consist mainly of coconuts. They had to depend on the Micronesian staff for instructions on where to look for the shellfish. They then had to build a fire, husk the coconuts, grate the copra, squeeze the milk. All these tasks were difficult to perform and were extremely time-consuming. Their troubles were compounded by the fact that they were not able to tell what time it was since all their watches were deposited in the main office. This requirement allowed the participants an opportunity to learn to depend on nature (as is done in many parts of Micronesia) for their time measurements rather than the usual device to which they had become so accustomed.

After eating their first morning meal they immediately began to prepare the next meal. Again, much effort was expended in gathering firewood, climbing coconut trees, husking dry coconuts, preparing young coconuts for drinking, setting the net on the reef for fish, spearing fish, roasting breadfruit, etc. Needless to say, the second meal of the day was not ready until late in the evening. And to their chagrin, they discovered that they had not produced sufficient food to alleviate the hunger pangs generated by all this extra work. Thus, they retired to their dark shacks hungry, tired and somewhat disappointed.

The next day the participants discussed their feelings and reactions to Micronesia Day. They all concluded that island life is indeed a very difficult life and survival requires a great deal of work. They also discovered that Micronesians do welcome change in their culture which will provide them with some leisure time and an easier and a more comfortable life. The participants also mentioned it was really not necessary to have a watch to tell time. They discovered that it was possible to guess, rather accurately, the time of the day using such clues as the tide, the position of the sun, the intensity of the tradewinds and, of course, by their own biological clocks. Others also realized why Micronesians have only two main meals a day rather than the usual three. Some of the educators immediately realized the hardships that were imposed on the Micronesian families when they sacrificed their children's assistance to the new school system which required them to attend school daily. Other educators pledged not to saddle their students in Micronesia with homework knowing that it is rather difficult to study in the dark. Finally, they learned that many Micronesian students will have expended a great deal of energy before school starts and so will seem tired. This should not be mistaken for boredom or laziness.

We have mentioned a few of the techniques used to acquaint the participants with their own culture and to introduce them to another culture. By giving them vivid experiences in contrasting their culture with their new culture, we hoped to promote a healthy curiosity about and a desire to participate in their new cultural environment. Other cultural values covered during the orientations will now be discussed.

From a Land-Oriented Culture to a Sea-Oriented Culture

Great emphasis was placed on assisting the American participants who came from a land-oriented philosophy and culture to accept and live amongst people who, throughout the ages, have developed a sea-oriented philosophy of life. We attempted to internalize the following often-ignored facts in participants.

Geographic and climatic factors helped to develop these two different cultures. The Americans came from a large land mass situated in a temperate zone with four seasons. The dependable transportation system, beginning with the invention of the railroad, placed punctuality very high in the spectrum of cultural values. The Americans place great importance on being on time and a whole social structure has developed around a very specific time-oriented philosophy. Also, the four seasons have caused the culture to develop the notion of futuremindedness--planting, harvesting, storing--all requiring future planning. Today, the American society is extremely futureminded. Such plans as five-year plans, life insurance, social security, retirement, fringe benefits, etc., are indications of the individual's preparation for the future.

On the other hand, the sea-oriented culture does not have four seasons. The inhabitants see no necessity in slicing their time into very distinct periods and do not place punctuality very high in their value spectrum. In the past, when a canoe sailed from one island to another, the sailors had a general idea of how long it would take the party to arrive on the other island. It, of course, depended on the waves, currents, storms and other unforeseen elements. This notion of general time has prevailed until today. Pacific Islanders who work in an American context learn to abide by the notion of punctuality during the regular work week; however, they revert to their notion of time during the weekends and on holidays. Knowing this, we devised several techniques to assist both cultural groups to appreciate and tolerate each other's pattern of behavior. All participants and staff were required to remove any kind of timepiece for two days. During this period, the participants learned to organize their day based on nature itself--the sun, tide, and mostly, their own biological clocks. Initially, this caused a great deal of frustration and anxiety when time specificity was eliminated. Yet later, they submitted to the passive aspect of time and some even learned to appreciate it. Of course, children had no difficulty in accepting this new pattern since they normally operate on general time elements anyhow. It was much easier for them to adapt to a "Pacific-oriented" time philosophy. They even augmented their learning by measuring the tide with a notched stick stuck in the sand.

Another "time" technique was to announce a forthcoming interesting activity, presented by the staff, which would enhance the participants' understanding of the Micronesian cultures. A specific time such as 7:00 p.m. was announced. Thus, all the participants gathered at the appointed time; however, the staff did not arrive until half an hour to 45 minutes later. This type of situation was repeated several times. Initially, there was quite a bit of consternation on the part of the participants, but later they accepted the "Pacific time" not only cognitively but also affectively as well.

Also knowing that one of the American cultural values is to save time, we deliberately extended several sessions way beyond the time allotted for them. It was very interesting to note how restless and fidgity many of the participants became 5-10 minutes after the supposed quitting time had passed. Several began to leave slowly and others who remained, so as not to offend the Pacific Islanders, did so with great effort.

We also investigated the time value by reading and then discussing the following dialogue, which took place between a reporter for the Micronesian Reporter and Joseph Fanachoor from Yap:

Reporter: "Let me ask you to look into the future, and tell me what you think Yap will be like 10 years from now."

Fanachoor: "Ten years from now, I think--same way, same picture as now."

Reporter: "Do you think there'll be any changes at all?"

Fanachoor: "No, I think only expectation, maybe buildings. Government buildings will be changed, but nothing for us to change."

Reporter: "Every two or three years, the United Nations Visiting Mission comes through the Trust Territory, visits all of the districts, many of the islands and they try to find what are the needs of the people, what the people want, what do the people think. If you were asked by a UN Visiting Mission what the people of Yap want for the future, what would you answer?"

Fanachoor: "I think Yap people cannot answer that question you ask me. And myself, too, I don't know, I can't answer. Because, you know, I can't answer because I don't think I have ideas for next year. I don't know what's with the future. That's why the Yap people cannot answer that question. They asked us before, a couple of years ago, and nobody answered."

Reporter: "Is that because the people are happy or unhappy?"

Fanachoor: "We don't know. We're happy or unhappy, we don't know."

Reporter: "Are you happy?"

Fanachoor: "No, I don't know. I can't say that. You see whether tomorrow I am going to get sick or I am going to get well tomorrow. That's why I can't answer for a long time. New Year or in the future, I can't answer that. "You see, if I say yes, I'd like there to be a change tomorrow and maybe tomorrow I am going to get sick or something like that and I change my mind and I put my question in the paper, you know. So maybe tomorrow they're going to say 'You said that before and there is your question which you put down and now you change your mind and now it's very funny."

Reporter: "So it's hard to tell about the future?"

Fanachoor: "Yes, very hard to tell."

Mastery Over Nature and Harmony with Nature

Another conflict which had to be faced in our orientations was that many of the Americans are accustomed to mastering nature, while most of the Pacific Islanders have learned to live with the natural elements. A specific example which came into view

almost immediately was that the Pacific Islanders had no problem living with all the various insects that were present at camp; however, the participants demanded insecticides and other aerosols and objected to the "unsanitary" conditions of the camp. Another example was noticed when the participants would always scurry for shelter whenever it rained, but the Micronesian staff did not exhibit any immediate sense of urgency to get out of the rain.

This aspect of the orientation was accepted by only a few participants who managed to adjust to nature and adapted themselves to live within the context of their new environment. The rest prepared for battle and fortified themselves with the products of modern science and technology to fight insects, fungus, amoeba, hookworms, rats, cockroaches, decay, termites, heat, typhoons, tidal waves, etc.

The American participants are from a culture which is normally spared from the natural traumas of life such as birth and death. For the most part, they are protected and sheltered from these "unpleasant" natural events. To illustrate this point and in order to prepare them for a culture where such events are accepted as normal aspects of life, we brought a live pig to camp. For several days the participants fed and cared for the animal. Finally, next to the last day of the orientation, the pig, which had become somewhat of a camp mascot, was slaughtered and butchered for the final "luau." There was no effort made to obscure this activity or to protect the participants from such unpleasantness. In fact, it was done in plain view of all. Many of the women and some of the men participants objected to such cruel tactics and were very unhappy that their children had to be exposed to such "carnage." The children, on the other hand, very eagerly viewed the entire scene and some assisted with this chore. This technique, we believed, served a double purpose: (1) it exposed the participants to a certain reality of life which many of them had not experienced before, and (2) it rather forcefully caused them to accept a new pattern of culture where people do not humanize animals and do not hide episodes of birth and death.

Entertainment

Americans are used to buying their entertainment, while Pacific Islanders are used to making their own entertainment. During the evenings, the American participants would gather around Micronesians who were entertaining themselves with songs and dances and slowly began to involve themselves in the activity. Those who did not participate voluntarily were gently coerced by the Pacific Islanders to join. In addition, we also exposed the participants to the wonders of their new marine world and introduced them to the adventure of the ocean through the mask and snorkle. This opened them to new vistas of leisure time activities such as shelling, spearfishing, coral reef exploration, etc.

From a Paper-Oriented Philosophy of Administration and Education to a More People-Oriented Pattern of Learning and Action

Throughout the program there was less emphasis placed on paper and books and more emphasis placed on learning from people. All language learning and all cultural learning on the cognitive level was done through sharing with colleagues and with island counterparts rather than through books and written materials. The participants began to depend on their inquisitive resources and initiative more and more for their learning rather than dependence on the paper handouts to which they were normally accustomed. In addition, through this technique, they began to realize that as educators their responsibility was education with the Pacific Islanders, rather than for the Pacific Islanders, as they were led to believe before they departed their homes.

Summary

1. Affective cross-cultural learning was emphasized and preceded the cognitive learning aspect.

2. The orientation was only the beginning of a process of experience which would continue throughout the participant's tour of duty in the new cultural area. This was emphasized so that participants would learn how to avoid becoming only passive observers of the Pacific Island cultures.

3. The training site provided the participant with the separation and isolation needed to cope with their new anxieties. It also provided them with a simulation of a new marine environment and provided them with a setting for an "ocean-oriented" style of living.

4. Emphasis was placed on assisting the participants in transporting themselves from "land-oriented" attitudes and frames of mind to "sea-oriented" behavior.

5. To provide an increase in frustrations and the expected adjustment, the normal daily comforts which Americans take for granted were slowly withdrawn.

6. Daily life was closer to nature so as to encourage the participants to learn how to harmonize with nature instead of continuing to harness and fight nature.

7. Participants were encouraged to depend on their own inquisitive resources and initiative for learning instead of depending on experts and authorities. Emphasis was placed on discovering and solving rather than just solving known problems.

8. There was a gradual change from a "specific" time orientation to "Pacific" time style.

9. A deliberate emphasis was made on helping the participants to shift from their "paper culture" to "people culture."

10. There was less importance placed on intellectualizing and more given to doing. Factual information was presented through case studies, role playing and informal conversations. This helped the participants to act on the ideas instead of just talking about them.

11. An attempt was made to develop positive attitudes and a healthy curiosity instead of only trying to shatter cultural barriers and dividers.

12. Activities were organized to help participants to understand their own cultural biases and to become aware of their personal reactions to differences.

13. Participants were introduced to the new notion of arriving at solutions through "feeling" and not so much through "facts."

Our experiences have shown that traditional academic disciplines are not directly relevant to performance in an alien culture. Success or failure in the orientation, as well as in the adjustment of the person in his new environment, depends on the individual personality and temperament. The capacity for adaptation and adjustment depend to a

great degree on the reality of expectation. We strived to create within the orientation participants a healthy curiosity, a willingness to try to learn and understand and, most of all, patience. After several years of orientation programs and a good deal of evaluation and follow-up on the participants, we feel that the techniques we used proved to be beneficial in meeting our objectives.

FOOTNOTE

[1]A very readable treatment that defends this assumption is available in Eliot Aronson's book, The Social Animal, published in San Francisco by Freeman and in New York by Viking Press, 1972, Chapter 8 [Editor].

TEACHING THE SOCIAL SCIENCES: INNOVATION IN SMALL SYSTEMS

JAMES E. RITCHIE
SENIOR FELLOW
CULTURE LEARNING INSTITUTE
EAST-WEST CENTER
HONOLULU, HAWAII
and
UNIVERSITY OF WAIKATO
HAMILTON, NEW ZEALAND

The substance of this report derives from curriculum development projects in which I have been directly involved, and observations and information concerning similar programmes in other parts of the insular Pacific. Specifically, I will be dealing with the programme of curriculum development in Papua-New Guinea based on my planning report to the Director of Education in 1968, an attempt over the last three years to decentralise curriculum planning in Micronesia so that local cultures in the six districts of the Territory can be reflected in the teaching of the social sciences, and finally a variety of local developments centered in Fiji at the Curriculum Unit which was established under United Nations Development Project (UNDP) financing to serve the Southwest Pacific.

It is far too early as yet to evaluate these developments since even in the short history of the longest standing of them the work is quite recent. Also, as will be apparent in the discussion of planning principles which follows below, continuous change is built into the methods by which these developments progress; these curricula are designed to be responsive to change, to local variations in culture and circumstances and to levels of teacher competence. But later it will be possible to study concept attainment, the development of social science concepts over time, attitudinal and other effects from the new programmes. Currently manpower and other resources, both scarce commodities in the new and small states of the Pacific islands, have been directed towards innovations, materials production and the raising of teacher competence and skill. The coordinated development of a research operation on these endeavors remains, at this time, an important future objective, but as yet, of low priority to the systems themselves.

Concerning Innovation

Before discussing particular approaches, their similarities and differences, there are certain observations concerning curriculum innovation in small systems that seem to have emerged as we have worked on these developments. At a meeting in 1969, of the Directors of Education of countries which participate in the activities of the South Pacific Commission, a small group looked into this question of how innovations can be promoted, protected, and

facilitated. Dr. Ken McKinnon (TPNG) and Mr. Burl Yarberry (Mirconesia) contributed in a major way to this working group. The ideas I will present were developed from those discussions but are not to be ascribed to either of these two. Most are obvious but profound.

The first problem is that though virtually no one is likely to wish to appear hostile to the idea of innovation, educational systems, simply as systems, respond organically to changes introduced. One might make a parallel with physiological reactions of the body to skin grafts or organ transplants. Any innovation which is too foreign, too massive or which is clumsily performed may set off an immune reaction so strong that rejection of the new idea or practice is predictable indeed, inevitable.

Yet innovations which are too minimal, timid or close to the existing system may be so rapidly and totally assimilated that change may be so slow, so imperceptible as to seem inconsequential, bring no impetus to morale or sense of progress to anyone concerned, administrator, teacher or student. Educational systems not only need to change but must be seen to be changing, for change is at least one educational objective that would receive universal endorsement.

Stimulating and provocative as such ideas as those Ivan Illich presents in Deschooling Society may be, the extreme radical view that systems of mass education are outdated and must be abandoned is too massive a change for these, or any other system of education, to accept. When Illich presented his notions to the Waigani Seminar at the University of Papua-New Guinea in May, 1972 the reaction was chiefly one of bafflement. Here was an audience in a country on the verge of achieving a tense autonomy. Its national prospects include not only the need to achieve a great leap ahead towards modern nation status but the reconciliation of old and new tribal and regional hostilities and distrust, enormous inequalities of opportunity, of wealth and education, as great as any to be found elsewhere, with, as yet, little or nothing by way of national symbols, history, literature or the other foci on which a national awareness might be based. That audience at Waigani comprised those who had been beneficiaries of a policy that regarded, and regards, education as the royal road to resolutions of many or most of the problems they and their country confront. Hence the bafflement and, for some, the anger.

There can be too much faith in the power of knowledge and too much endorsement of schooling as the means of attaining or delivering it. There is also substance in the conclusion that colonial powers foisted onto Pacific peoples educational systems that were woefully inadequate, pitifully under-financed, singularly inappropriate, badly administered and curiously ineffective. Some still do. But those able to make such judgments were so enabled by the systems of education which they might castigate. They know it and they are not therefore about to reject systematic education entirely, to rush to endorse its abandonment for such untried proposals as learning centres where teaching would be provided by the able only to the interested.

Systemic education is not yet something that developing societies can afford to do without. Nevertheless the crisis in Western education is undoubtedly real. Commentators on it are attended to by the educated in other countries which are confronting crises of their own and of quite different character. Seeking that which is seemingly the best, the most modern, the newest, those responsible for the direction of education in the small states of the Pacific may find the polemics of radical education frankly not only unappealing but downright unreal. And yet, if there are intellectuals in the West ready to damn outright the large system model, their critique indicates that Western forms alone may not provide the only model or that of greatest utility, either now or in the future.

For the most part another model is available and its nature well understood still by some who live in these islands. This is the model of community instruction, now so distant in time and experience in most urbanised countries that only anthropologists understand what it involves, yet implicitly, in the memories of old people in peasant and tribal societies, a

hoped for nostalgic return. Such return is not possible. Those who speak of it or seek it are purchasing sentiment at the expense of their children's and grandchildren's futures.

Yet within the evolution of universal mass education there are methods, resources, and connections that can bring a reconciliation between the large system model, universalistic, bureaucratised, centralised, relatively impersonal, and the personalised, culturally particularistic model of what is learned in family and community in tribal systems of instruction. It is this possibility that is being variously explored in the innovations this paper reports.

Changes must take place within systems and be systematically related to all that goes on within the systems. The changes must become quickly institutionalised, disseminate rapidly, be seen as "better" and as rewarding to all involved and they must not be seen as threatening, as too challenging to prior existing levels of preparedness or tolerance. In socieites as small as these (2-3 million population, the largest) responsiveness to the surrounding society must be maintained, knowledge gaps between generations closed, and personal and national objectives reconciled. Overall is the pressing need to build, or in some cases, (e.g. Micronesia) tear down and reconstruct, strictly in terms of economic realities. These may include continued financial support from wealthier or more favoured nations and from UN programs or regional equivalents of them. Overall the rallying cry is now for self-reliance and regional cooperation. Both are realistic objectives, attainable now, if the logic of reform on their basis as premises is totally accepted and rigorously worked through.

This process is so well under way in Western Samoa, in Fiji, in Papua-New Guinea, in Nauru and in parts of Micronesia that these countries will lead and aid the rest in what needs to be done in the decade ahead. Others in the metropolitan countries with longer histories in mass or universal education, or in the traditions of mission education, can support these developments in many useful ways but the principles of self-reliance and regional cooperation are becoming so strong, and are so self-reinforcing that even unwitting infringement of them will lead to tension, distrust and either withdrawal or cynical dependancy.

Discussion at the 1972 conference of Pacific Island Directors of Education jointly sponsored by the East-West Center and the South Pacific Commission was a demonstration of this. Aid, of any kind, is acceptable only on terms which respect local culture and autonomy. The direct costs of aid to the receiving country must be carefully assessed even before it is offered. There is no point in plans that involve costly texts which, if they can be afforded at all, may soon become a rigid liability on systems in rapid change but having few resources. Bilingual education is a lost cause until English language programs have been brought to leve s acceptable to those within recipient countries who are seeking modernisation. Overall the Directors seemed willing to seek educational goals far lower and more modest than those of the expert consultants and professional innovators who attended (myself included) but seemed well aware of why they were doing so.

As in any developing system, exigent circumstances lay behind what sometimes might have seemed like reluctance to innovate and unwillingness to leave the colonial heritage behind. At the same time the innovative role of the UNDP curriculum project at the University of the South Pacific was not unequivocally endorsed. For one thing the French territories, Papua-New Guinea and Micronesia look to other sources for support in educational change. A pattern of regional cooperation that might favour the "fat-cat" countries with greater wealth and resources seemed like no cooperation at all. Western Samoa did not become independent in order to be dominated by Fiji. The pattern of future regional educational cooperation in Micronesia will not be decided by Saipan, nor perhaps wholly by Palauans. Cooperation is not be be established by fiat but worked out by service. And the seemingly least endowed, by the Marshalls say, or Niue, may have much to offer as a pattern of cooperation develops that respects self-reliance and the possibility that the seeds of successful innovation may take root in improbable and unlikely places.

Once the speeches and the position making and talking are over what educators in the insular Pacific are seeking are modest, particular, pragmatic, ways of achieving demonstrable educational progress, in terms of skills and competencies that fit their history as a culture or cultures and their aspirations as modern states. That on the face of things ought not to be too difficult a desire to fulfill for it is far and away short of the "all things to all men" goal that Western education seems forced to endorse.

Finally the sources of innovation can be found within, rather than outside, the countries concerned. This is not to invalidable the role of experts and consultants, for the need for these has never been as great as it is now, the cost-benefit of their services can be very equitable and their willingness to serve may be strong. But these new countries are justifiably proud of their newly educated intellectuals, their own modern men. The real follow through of innovations rests with such people so why not go the whole way and recognise their initiative role also. It may be necessary for the administrator to shelter and protect such local innovators until it is time to bring out for wider dissemination what time and experience shows to be of value. It is far better to harness such energy to continuous reform than to find oneself fighting some frustration driven radical movement.

The consultants role is not just that of innovating but of facilitating the institutionalising of innovation. He is, after all, not of the culture and is not (hopefully) motivated by any desire to run peoples lives for them. If he is, he will fail anyway. Innovation is not merely a matter of having bright ideas or applying the newest theory and it cannot be used as a means of experimenting or playing around. It is a process whereby a structure is changed in ways that release energy, which maximises on available resources, promotes creative response and essentially allows the system itself to respond to change smoothly without threat or harm to the system or its objectives and thus promotes confidence as well as a demonstrable attainment of specified and desired goals.

High School Social Science in Papua-New Guinea

As the writer is preparing a book length report on this program, the present purposes will be best served by a brief statement of the general planning principles involved in this development. In the original report in 1968 I suggested a number of broad principles, not all of which proved useful and viable but which guided the initial planning within the Department of Education.

These can be simply listed:

1. The curriculum should be concept rather than content based.

2. A spiral-development structure should be devised in which successive teaching would return to earlier taught concepts, deepening, broadening and applying them as learning progressed.

3. Each year should have a unifying thematic concept.

4. Wherever possible local experience should provide the content by which and through which the attainment of concepts should progress. Both local equivalents of Western concepts and local concepts having no Western equivalent could thus be utilised.

5. The curriculum should be actualised (i.e. "taught"--there is not neutral term for the process involved) through methods which come as close to real experience (i.e. beyond the classroom) as possible.

6. Discovery methods, experimentation, and simulation, far from being beyond the capacity of the children, seemed to be the natural stuff of

of social science learning. Local ways, consistent with local culture, of developing and utilising them should be sought.

7. Expensive texts and specialised libraries are educationally counter-productive. Rather each classroom or each teacher should be serviced by inexpensively reproduced "kits" of classroom tested suggestions and materials.[1]

8. Teachers should themselves be involved, from the outset, in the discovery of effective ways of teaching, or the providing of experience, or examining experience, from which concepts would be developed.

9. The teachers should be serviced with simple but up-to-date, accurate and lively input by whatever means and media possible, progressively, as development continues; but they should not be overwhelmed with material either too massive, too technical or too abstract.

10. A chain of information should be established such that any good idea, originating anywhere in the system from administrator, to class teacher, to student could be quickly picked up, tested and disseminated.

11. Rather than state beforehand what the concepts to be taught might be these should emerge, pragmatically, as development of the curriculum progressed.

12. The whole system and its servicing should be regarded as in a process of continuous development and nothing be allowed to become as permanent or sacrosanct that changes could not be made.

13. The classroom introduction should be preceded by a teacher training program and new teachers trained in the new curriculum posted to team-teach with more experienced social science teachers.

14. The need for specialist teachers and for a room specialised as a social science laboratory should be recognized administratively and the status, confidence, and espirit-de-corps of this branch of teaching promoted.

15. Specialised studies in the social science disciplines should be available, end-on to the core course in the final two years of the six-year program, but a full interdisciplinary program should be provided for all six years for those non-specialist students whose needs would best be met this way.

We had in mind that social science should be taught through local culture since within New Guinea itself there was variety enough to demonstrate almost every social science concept and principle except perhaps those of most general international nature. Working in this way we hoped to achieve an automatic response both to the problem aspects of the future of this country and to the students' needs for relevant teaching and experience. We believed that there would be a quite rapid phasing out of expatriate teachers and that the new curriculum would prove easier for local teachers than for expatriates.

We wanted to maximise on teachers as much of the innovation as we could. By bringing teachers in on curriculum planning, on materials production, on evaluating materials, and on the continuous development idea we might attempt to overcome the traditional view, in this as in most mass education systems, that curricula are formulated on Mt. Olympus, blessed by the Gods, and thereafter imposed on teachers, a yoke they bear. We wanted to try and unify teacher education, in-service training, materials production and the development of a pedagogy and technology for class use and classroom

teaching around cells of teachers. The most creative would be idea men; the most hard-working the producers of materials; the most critical, the evaluators, the most charismatic, the publicists. We wanted a system on which the administrator's hand need rest but lightly and where the excitement of rejuvenation could always be felt by any participant at any level.

We not only demanded a lot of people within the system but also we shamelessly begged and borrowed from scholars and experts wherever we could find any who were suitable and willing.

In the end what do we have?

Each year of the four years currently under development has a major theme

I. Similarities and differences

II. Change

III. Adaptation

IV. Modernity

Within each year there is a cycle widening from self-study through studies of families, communities or localities, regions, the nation, to include in years II, III and IV regional studies of the Pacific,other nations, and international processes.

For each unit within each year the Curriculum Unit at Headquarters (Konedobu) produces (1) teacher input booklets, written usually by someone expert in that topic, (e.g. Unit II has material on changes in families), edited to ensure an appropriate level for teachers (but too high to permit direct teaching from it), (2) a teacher's guide which analyses this material into teachable units and in terms of concepts, (3) some guidance as to actual teaching methods which might be used; (4) materials and examples.

The implementation of these ideas rested initially on the shoulders of Mr. John Lee whose judgment of what was practical and what not was as unfailingly sure as any administrator I have known. His energy and effort on behalf of the program is acknowledged. After his untimely death in an aircraft accident Mr. Ian Whelan was appointed to head the unit. The work goes on.

It is hard to pull together and present so complex an undertaking as this, the more so since beyond my initial involvement in the basic report I have had only a few weeks of contact with the program each year. This alone demonstrates that, in this country anyway, the facilitating, involved non-involvement concept of the consultant's role has paid off. There has been no extensive program taking students from the area for training, no injection of special outside development funds, no commercial publisher involved, no costs beyond those which the system, strained though it is, can bear. Furthermore there has been no dependency developed on me or on any other consultant or service. Papua-New Guinea is free to avail itself of other consultants, and has done so, but the effort of development and any credit which the innovation deserves belong at home.

A Typical Package

In the first year of the Papua-New Guinea program the third unit concerns the family. Let us open the package designed for it and see what it contains. The package is in three parts. Part I of the teachers' guide was prepared by Dr. Ruth Latakefu of the Anthropology Department at the University of Papua-New Guinea and comprises her review of what families are and what they do. It includes a case study of the family in Busama, a village on the North Coast of New Guinea. All this is covered in 33 mimeographed pages and is model of compressed and simple presentation.

Before distribution it was reviewed by the editorial committee of the Curriculum Unit and then read by lecturers at the Goroka Secondary Teachers College, by groups of specialist teachers at six high schools and edited by one of their numbers. Of the nine references, mostly anthropological studies, all are available for borrowing from Headquarters. Five derive from field studies conducted in New Guinea.

The Teachers Guide Part II identifies the four major concepts to be taught; family, rights, obligations, and custom. There is detailed explication of these with examples. The topic is reviewed and suggestions for a teaching approach made. There then follow teacher aids in various forms. Worksheets, student questionnaires and an interview format to compare an expatriate and a local family, directions for constructing kinship charts, case study materials for study of a family in each of West Irian (the other half of the large island of which Papua-New Guinea is the easter portion), a neighboring country--the British Solomon Islands Protectorate, and, for contrast, Swaziland. Slides are included along with personalized stories, kinship tables, descriptive data. A tape is supplied of a play written by a teacher. The full text is included in the guide along with suggestions for using these materials. The play concerns the problems encountered by an educated Papuan returning to his home, village, and family. Directions are given for analysis of the play and ways of leading on from it to a complex game in which students take family roles, act out patterns of rights, obligations, and customs as they throw dice which determine the problem situations with which they must deal. Players gain or lose from their store of counters according to preset values on role performances. But the real value of the game is in the discussion which goes on as the game is played by members of the "family." The materials structure the simulation in a formal way. There is considerable scope for the students to restructure or to add content from their own cultural experience.

The final teaching suggestion is that a newspaper be examined for family material, (especially the "Births, Deaths and Marriages") and cultural deductions made.

The teachers guide has a last section which makes seven explicit suggestions for the evaluation of concept attainment achieved by the students. Concepts introduced in the two units taught earlier in this first year are included, for the materials in the "Family" unit provide opportunity to activate, extend, and amplify the earlier material.

Now, all this material originated in various ways, but mostly from teachers themselves. This was done by getting teachers together in a seminar to work over the unit conceptually, then setting them to work in teams to produce their own contributions to the materials store. Not all these were finally used, but all were considered. The Unit Staff took all contributions and tested them in a set of schools where specialist teachers tried them out. Not only were teachers involved in every aspect, all the way along the line, but the materials allow plenty of scope for teachers to adapt, modify, supplement or otherwise change the materials as well as use them simply as guides or models from which to launch out on their own.

The Fiji Project

Many of these same ideas have been included in the UNESCO curriculum project at the University of the South Pacific. Where the Papua-New Guinea project had to face a specific problem, how to weld into a modern nation state the scattered, diverse tribal cultures of a country not so much exploited in its history as neglected, the Fiji project deals with only 10 cultures. But each has its own autonomous education system and the Fiji unit must work, in a purely advisory role, through them. Respect for the indigenous cultures is thus doubly protected but the task of development is made necessarily slower.

In the words of the planning document produced by the unit the program places the highest priority on enabling students to be well-informed about their own society, able to think intelligently about it, put it in world perspective, and be interested and concerned about it.

Activity methods are endorsed but the approach is rather more traditional and less clearly experiential/enquiry method based than in Papua-New Guinea. There is less direct contact with and control of teacher-training and in-service activity which makes the coordinated kind of program a single system can accomplish less viable. Though teacher involvement is simply less available in this situation, the Unit seeks such involvement in two ways. Within the planning, units will be produced of two kinds. Core studies will be more or less common in all the territories but will involve local research by pupils and teachers. Along with these, support studies (inexpensively produced) will be developed to extend and reinforce the basic concepts, skills and attitudes of the core studies. Teachers will then choose which support studies they teach in relation to the location of the school, the level of the children, and the teachers interests and competence. Hopefully, as the project continues, local involvement in the support studies will prove possible.

The program covers four years, for each a major theme:

Year 1. Living Together:	Family and kinship Community and nation Race and migration
Year 2. Making a Living:	Human needs Using resources Competing and co-operating
Year 3. Freedom and Control:	Rules, regulations and customs Sanctions Rights and responsibilities
Year 4. Planning and Changing:	Urbanisation Making decisions Community and national planning.

There are two core units for each sub-heading and it is proposed that there be a varying number of support studies for each unit from which teachers will choose two in each case.

Without UNESCO aid nothing of this scope could have been undertaken for these are tiny states with many claims on their limited economic resources. Nevertheless, the task of training teachers and getting the developments operational rests there. It is far too early to judge how adequately the problems of decentralising have been overcome, or to evaluate this program. Indeed its implementation has really only just begun. Along with it some of the countries concerned are making herculean efforts to bring local culture into their educational systems in their own ways; in the case of Western Samoa, in particular, through courses in Samoan culture and language.

The central idea of the New Guinea curriculum is that the apparent conflict between a universalistic and conceptual social science and the continuity of local culture can be overcome. The chief answer to the question of how this may be done is to trust teachers to do it, to direct them to attend to local experience, and to provide them with means and models and training to do so. At this point in time it is not clear that the USP program has found ways of activating this strategy. But this may be a premature observation.

A Sample Unit: Pacific Migrations

One thing that all the countries concerned have in common is a traditional history of settlement by ocean voyaging and contemporary migration processes both of resettlement

and for education and training. The unit on Pacific migrations shows ingenuity in applying the low-cost/high-utility principles which we also saw in the New Guinea material.

In similar ways there is an expert-prepared teachers input, a brief but accurate and simple exposition of all that prehistory, archeology, and oceanic geography has to offer in reconstructing the drama of the settlement of the Pacific.

This is followed by an analysis of this material to clarify the concepts involved and suggest a pedagogic strategy. The materials provided include three "factlets," tiny mimeographed booklets on the ocean current system of the Pacific, the wind system, and on latitude and longitude. These use very simple line drawings and diagrams to illustrate the concepts and processes involved.

Teaching of the unit closes with a game, the Pacific Migration Game, which is an excellent example of how the most modern thinking about activity teaching can be applied at very little cost. The game is played on an actual map of the Pacific marked into squares of latitude and longitude. Wind belts, currents, and islands are marked. Players begin on the eastern side and play as directed by throwing dice. They work towards a target island and if they reach it they may settle it or move on to another. If the island is already settled they work out an outcome with the occupying player and continue to play in terms of this outcome. When a player lands on a marked wind or current he or she must move in the indicated direction. There is a lot of water in the Pacific and moving around it in this simulation provides some awareness of some of the realities voyagers face. Teachers and pupils are invited to experiment with other sets of rules, to invent their own ways of using the game.

This game is entertaining, local, and easy to play--an advance over the textbook dominated, alien content of previous curricula. But more than this it involves the players in strategies, decisions, discussions, conflict and their resolutions, and a chance for a student-directed, quite personal, integration and review of all they have learned about the geography history, populations and migrations of the Pacific basin. They see their ocean not as a body of emptiness around which are ranged rich and/or powerful nations, not in terms of the paranoia of geo-politics but simply as a place, their place, their tank, through which, over time men have moved, to settle, to move again, an open ocean of islands which imposes its own sense of limits, freedoms and identities.

Micronesia: Diversity in Dependency

As a strategic Trust Territory under a UN mandate, America has administered Micronesia directly from Washington and through the office of the Administrator on the island of Saipan for over 20 years. The recent educational history of the Territory has been marked by substantial injections of money (so much so that Fr. Hezel at Xavier High School in Truk writes of education as Micronesia's largest industry), a massive scholarship programs to help train teachers both in the Territory itself, on the U.S. Mainland, in Hawaii and in Guam, and an extremely rapid attainment of universal education based on U.S. administrative and schooling models.

So much has been done, so fast, that it is not unexpected that there have been considerable disruptive and alienating outcomes. Basically U.S. schooling is for employment in some area of service or production, to develop autonomy and independence, industry, effort and responsibility and other valued qualities of citizenship, and to live without community support. The applicability of such a philosophy of education in Micronesia has been frequently and critically questioned not only by Micronesians but by Americans themselves--even those involved in administering the Territory.

Because the islands of the area comprise, broadly speaking, six discrete cultural groups, efforts have been made to decentralise some aspects of educational administration. Curriculum officers work in each area and their activities are coordinated by administrative officers based in Saipan. While some aspects of their work (e.g., in math or English language) involve the implementation of centrally devised schemes, a decision was made that the social science curricula could be localised. Thus each district was allowed considerable freedom to experiment, and local curriculum councils were encouraged to work out this policy.

Well intentioned as this policy may seem the effect has been, so far, less productive than was hoped. In particular, teachers, in many cases have clung to existing curricula because the support structure for the innovative orientation has not been built fast enough to give them confidence. It is hard to allocate blame for this and probably unjust also. The fact is that a population of 100,000 scattered over 6 million square miles of ocean presents enormous organisational problems if changes are to be introduced coherently.

Furthermore, the U.S. model of federated political structure, with local legislatures in each district (equivalent to states) and a central government in Saipan (like that in Washington) has imported a concept of opposition directly parallel to the Federal vs. States Rights tangle on the U.S. scene. The appropriateness of this seems not to have been seriously questioned till recently. The effect of these notions on Micronesia has been unnecessarily cumbersome, inefficient, expensive, and undesirable, the more so since it would seem to be inexpedient. The confusions in contemporary Micronesia led some commentators to charge that neo-colonialist motives on the part of the American government lie behind this situation, and that needs have been expanded faster than the economic base and economic dependency on the U.S. deliberately promoted. I leave that matter to activists, politicians, and historians to pursue.

It is however true to say that education in any developing country becomes a political matter, often fiercely so. Its development is costly, proportionately more so perhaps than in developed countries. Clear, imposed centralised, systems may seem the cheapest way to achieve goals but they may also be the most vulnerable to political influence. Americans value freedom from such influence and, for Micronesia, have been prepared to pay the costs of developing the educational structure designed to express this value. But that in itself is a political decision. Currently Micronesia politicians endorse it. Whether they continue to do so, or can afford to continue to do so, remains to be seen.

Working in Micronesia can be a baffling business. Money flows and stops according to political decisions made in Washington contingent upon factors related to the American Mainland scene and its problems and influences. What happens in one part of Micronesia may be extremely slow in diffusing through the Territory. Within each district an enormous development discrepancy exists between the metropolitan centres and the outer islands, some of which have contact via a government service boat only once or twice a year, sometimes less. Over the years a plethora of experts, consultants, advisors, survey teams, and researchers have washed these shores and left a residue of distrust, sometimes masked by politeness, sometimes not. Finally the dependency that rapid development has created, in education at least, has become the greatest barrier to the attainment of a realistic and self-reliant program.

Nevertheless experimental development in social science curricula has been begun and several examples are significant signs that what needs to be done can be done. Let us look at a few examples.

In the southwest of the Territory, on Koror, the urban centre for the Palau group, an oral history program has been in operation that constitutes a remarkable instance of self-help. Though not in fact in the high school this program seeks to service a desire to incorporate local history, traditions, and culture into the teaching of the social sciences.

The program began as an OEO activity within a school-age project at the local Community Action Agency. The withdrawal of Federal funds for OEO probably signals its demise but what has been accomplished should go on record as evidence of the contribution OEO made in one small area of its operations.

The project was based on a clearly expressed need. Young people, through schooling, were becoming alienated from their culture. To correct this the simple and obvious tactic would be to find some new way of involving them, a way consistent with modern education. Under the direction of other young people, themselves recent high school graduates, teams of youngsters were sent to collect oral records from old people in the villages of the island group. They used tape recorders to collect these tales.

The tapes were then transcribed into Palauan text (giving practice in Palauan orthography and in typing transcription along the way). The texts were then translated by the children and their translations checked by older, more knowledgeable Palauans. These texts constitute a file which is rapidly approaching a complete record of Palauan oral tradition.

Two booklets of legends have been edited and published from this project. A detailed text of the contact history of Palau as seen by voyagers, missionaries and other commentators has been prepared and, if the project can be funded to continue, an "inside" history of these events as seen through Palauan eyes will be compiled.

These results are considerable and commendable but of perhaps greater significance is the meaningful experience which a number of young Palauans have had in renegotiating a viable future for Palauan culture. The products of the project (published papers and so forth) are not as significant as the processes they represent.

Unfortunately a plan to develop high school utilisation of these data and to set up a curriculum development project has been aborted by withdrawal of funds. Yet faced with this the local high school staffs have set up a curriculum seminar that may accomplish the same objectives in other ways.

At Xavier High School in the Truk group two skilled teachers, Fr. Hezel and Charles Reifensneider have mounted, with headquarters assistance, a highly impressive programme of materials development. Two programs have been published so far; "Mirconesia: A Changing Society" and "Micronesia Through the Years," both with well designed teacher manuals for directing the studies and attractive, class-tested, student workbooks. Seminars on the use of these have been run in the teacher in-service training program of the Department of Education in Micronesia.

The scholarship behind these courses is of very high quality and it is kept, where it should be, as an underpinning for the activities by which the students attain concepts and content relevant to their understanding of their world.

Though produced on Truk these materials draw on the whole Territory and, implicitly, accept that a Micronesian allegiance and identity can be fashioned. At the same time the local content is respected so that the political future of Micronesia is not assumed or pre-judged. A program of locally developed parallels to the itemised lesson materials would certainly be possible and these two workers clearly state the need for such.

The administrative problem in Micronesia would seem to be one of both stimulating and supporting development to parallel these workbooks and to continue to extend similar efforts into curriculum areas not yet covered or levels of data handling not yet reached. There is a definite need for an exhaustive contemporary studies program which would train teachers to pick up and to utilise current events in Micronesia and extend from them to a Pacific-in-the-World perspective.

Finally anyone who has the chance to do so should stop by and see the cultural centre in the principality of Net in Ponape. This small, modest, institution comes close to the learning-centre model. The centre comprises about a dozen natural-materials huts which serve as centers for canoe manufacture, plaiting and weaving crafts, and song and dance. At specified times tourists come and are welcomed and entertained in traditional style. Their payment supports the Center (though it also gets a grant from the local legislature). At other times groups of school children come to the Center for instruction in matters pertaining to Ponapean culture. The "instructors" are not Western-style trained teachers but the old people of the area, sufficiently numerous to give a 1:4 instructor-pupil ratio and able to utilise, implicitly, a style of instruction and learning which is Ponapean. There is no inattention, no inappropriate or disruptive child behaviour, no lack of industry, the learning is demonstrably pleasurable as children and their elders remain "on-task" for two to three hours at a stretch.

Watching Net at work is a heartening and absorbing experience. Mass education on a model other than the literacy-classroom based one we are habituated to, is possible and local culture learning can be fun. Ponapean children will not, by these means, learn to fix washing machines, service auto engines or master the complexities of international finance but for what it aims to do the Net Centre is a wholly appropriate, substantially successful, and thoroughly modern venture.

Conclusion

Through all this several principles seem to run.

1. If the alenating effects of education are to be minimised and alleviated its goals must be understood by, and articulated in terms of, community opinion. In Papua-New Guinea we did have problems getting villagers to accept pupils (not their own kin) coming in for local village surveys. But working through the problem put education into a community context. In Palau the old people had to be persuaded to cooperate, and the young made to understand why the elders were reluctant. Contracts were entered into. In Net Community members are trusted to be teachers (and prove to be better at it than those "trained" to be so in some cases).

2. The choice traditional or modern is only linguistically dichotomous. A village status sytem can work as well on a cash economy as on a garden economy provided those whose system it is make the changes involved themselves and are not deflected from the inherent wisdom of systemic choices by outside interference. Science has not eliminated daemons because that is not what science is for. It is for a better technology and an easier less uncertain life. Ghosts are for something else.

3. If it is hard to motivate children to learn, you are probably teaching the wrong thing, at the wrong time, to the wrong children. We can afford to make very few assumptions about cross-cultrual teaching and so must make every effort to locate it, and all that services it, in within-culture development programs that remain incessantly open to responsive innovation.

4. If the means remain modest, materials preparation can be kept both inexpensive and innovative. Teachers can be taught principles of good materials production more cheaply than can good materials be produced and published by centralised administrators. A hearty, healthy attitude of discarding out-moded materials and making new ones for yourself should and can surplant the worshipful attitude to the graven idols of the textbook tradition. There are some books that roundly deserve to be burned.

5. Teacher cooperation, teacher initiative, and teacher criticism are the well-springs of the new curriculum. If a teacher says "I can't do it" and if he has tried, then listen while he tells you what he can do. That is, almost certainly, the right place to start and you may together see a whole new way ahead as a result.

FOOTNOTES

[1]At first glance, this suggested principle may seem as radical as the ones Illich made and which were rejected by the Waigani Seminar (see p. 49). The purpose of the principle, however, fits in well with the other 14 points. From conversation with Dr. Ritchie, I understand his meaning to be that expensive, attractive hard-cover books carry status with them that may not be deserved. Because of their expense and attractiveness, they are not likely to be discarded if a committee suggests that they have shortcomings. Ritchie prefers the development of inexpensive, relatively unattractive (e.g., reproduced through the ditto or mimeograph process) materials which will not cause guilt feelings if a committee feels that they should be discarded and something new tried. In addition, the inexpensive materials can be made to fit a local situation much more easily than the expensive materials brought in from the outside. [Editor]

INFORMATION FOR CONTRIBUTORS

The Culture Learning Institute will be pleased to publish suitable papers in Topics in Culture Learning submitted by people both affiliated and not affiliated with the East-West Center. Papers should be concerned with a theme that is relevant to one or more of the four topical areas as explained in the editor's introduction. Ideally, papers will be written so as to appeal to the general reader rather than to specialists in any one discipline. Any of this volume's eight articles can be consulted for guidance on length and forms for references. Submissions will be reviewed by at least two referees. Further information can be obtained from the editor, Culture Learning Institute, East-West Center, Honolulu, Hawaii 96822.

TRANSFORMATIONAL GRAMMAR AND COGNITIVE PSYCHOLINGUISTICS.

MARK LESTER
RESEARCH ASSOCIATE
CULTURE LEARNING INSTITUTE
EAST-WEST CENTER

Introduction

The following is a chapter from a monograph in progress tentatively titled "The Impact of Transformational Grammar on Foreign Language Teaching." The chapter is taken from a section of the monograph called "Background." The monograph is an example of one kind of research being carried out in the Language in Culture research area of the Culture Learning Institute. Currently, Language in Culture is mainly concerned with two broad areas: (1) the study of the social and personal factors that influence language behavior (what might loosely be termed sociolinguistics), and (2) teaching English to speakers of other languages.

In this latter area, Language in Culture has been most active on two fronts, conducting in-service training programs in English language (and supporting degree students at the University of Hawaii), and in supporting research on English language curriculum design and in the developing of actual English language teaching materials. The monograph is an example of research on the theory of English language curriculum design.

Language in Culture also plans to conduct actual projects in curriculum and materials writing. One such project will bring participants together from Asia, the Pacific and the United States to work on a curriculum or a set of materials appropriate to their own situations. We hope that by providing the participants with specialized resources of the Culture Learning Institute (and the University of Hawaii) they will be able to do much more sophisticated work than they could in isolation in their own countries.

Background for English Language Curriculum

Before discussing the impact of transformational grammar on the English language curriculum, it might be useful to provide some background information about transformational grammar and its corresponding theory of psycholinguistics, which for lack of a better term, I will call cognitive psycholinguistics. In the brief overviews below, the focus will be on those aspects of transformational grammar and cognitive psycholinguistics that are relevant to the English language curriculum. Accordingly, some otherwise important aspects of the history of the two disciplines will not be touched on.

Transformational grammar was largely the invention of one man--Noam Chomsky. A general outline of transformational grammar first appeared in Syntactic Structures in 1957. In 1965 Chomsky expanded and modified the original theory of transformational grammar in Aspects of the Theory of Syntax. In 1968 Chomsky (with Morris Halle) dealt with the phonological side of the theory in The Sound Pattern of English.

Perhaps the easiest way to make an initial rough characterization of transformational grammar is in terms of the basic distinction it draws between what people know and what they say. Chomsky was interested in characterizing what it is to know a language. Broadly speaking, our knowledge of our own language is manifested in three ways: (1) by our ability to distinguish grammatical and non-grammatical sentences in our language, (2) by our ability to perceive the tacit relation of parts of a sentence to other parts of the same sentence, and (3) by our ability to perceive the grammatical relation between different sentences.

At first glance, the problem of grammaticality seems trivial. We recognize the grammatical sentences in our language because we have previously encountered them. All the rest are ungrammatical. However, when we look at the huge magnitude of the number of possible sentences, we can easily see that grammaticality is not a function of exposure to known grammatical sentences. For example, taking even a highly restricted vocabulary of 10,000 words, the number of possible three-word combinations is 1,000,000,000,000. Suppose that only one out of every one thousand-word combinations is actually a grammatical sentence. Even then, it would take over thirty-one years of listening to three-word sentences at the rate of one a second, twenty-four hours a day, 365 days a year to just hear them all once. Obviously, exposure and memory are not adequate to explain grammaticality.

A speaker's ability to make judgments about grammaticality must involve some kind of abstraction on the speaker's part. For example, the classification of words into the abstract classes of parts of speech enables us to make strong generalizations about the nature of grammatical sentences. Virtually all the grammatical three-word sentences in English are made up of the following sequences of word classes:

Article Noun Verb (example: The roof leaks.)

Noun Verb Adjective (example: John is tall.)

Noun Verb Adverb (example: John is here.)

Noun Verb Noun (example: Birds eat worms.)

Noun Verb Preposition (example: John calmed down.)

Verb Article Noun (example: Shut the door!)

All other combinations of word classes will produce ungrammatical sequences, for example, Noun Noun Noun, Article Verb Noun, Verb Preposition Verb and so on.

There are many areas of English grammar that show that our judgments about grammaticality depend on our intuitive use of very complex abstractions. One illustration of this is in the complex grammatical dependencies found in the formation of the tag question. Any statement in English can be turned into a tag question. Here are some examples:

Statement	Tag Questions
Today is Tuesday.	Today is Tuesday, isn't it?
John can swim.	John can swim, can't he?
Alfred isn't ready.	Alfred isn't ready, is he?
The boys haven't started yet.	The boys haven't started yet, have they?

In order to be grammatical, the tag question must meet the following conditions: the tag part must use the same verb (or first auxiliary verb if there is more than one); it must make a positive-negative switch (that is, if the statement is positive, the tag part must be negative; if the statement is negative, the tag part must be positive); and finally, the tag part must end with a pronoun that is the correct substitute for the subject of the statement. If the first or third of these conditions is violated, the resulting sequence is ungrammatical, for example: *Today is Tuesday, doesn't it? and *Today is Tuesday, isn't they? If the second condition is violated the result is not a tag question but an echo question with an entirely different meaning: Today is Tuesday, is it?

Another example of a different kind of complexity is found in the rules that govern the formation of the comparative. The following comparative sentence

John is taller than his father is tall

would normally be said in a more contracted form. We would say either

John is taller than his father is

or

John is taller than his father.

The rule seems to be that those elements on the right-hand part of the comparison which are identical with their corresponding element on the left-hand part can be deleted. However, this is not so. For example in the following sentence

John is taller than his father is wide

we cannot delete the second is:

*John is taller than his father wide.

In a somewhat similar construction where two sentences are conjoined, this deletion is possible. For example, we can say either

John is tall and his father is wide.

or

John is tall and his father wide.

The rule which governs the deletion in comparative sentences appears to work on a right to left basis. That is, if the right-most element in the right-hand side of the comparison is identical with its counterpart on the left, it may be deleted (tall in the first example). The rule then applied to what is now the new right-most element (is in the first example). This cyclical, right-to-left application of the rule explains why

*John is taller than his father wide

is ungrammatical. Since wide and tall are different, no further application of the rules is possible. If the adjectives were identical but the verbs were different, the second adjective would be deleted, but not the verbs. For example from the sentence

John is taller than his father was tall

we get the deleted form

John is taller than his father was.

The was cannot be deleted without making the sentence ungrammatical in the intended meaning.

The examples have illustrated three kinds of abstract relations: categorical abstractions (parts of speech), dependency relations between abstractions (the tag question), and restrictions on the application of an abstract grammatical rule (the comparative rule). In order to distinguish grammatical sentences from nongrammatical sentences, speakers of the language must be able to employ these kinds of abstract grammatical relations.

The second way that our knowledge of our own language is manifested is by our ability to perceive the tacit relation of parts of a sentence to other parts of the same sentence. Dr. Roderick Jacobs gives a striking example of this by the following pair of sentences:

Cinderella ordered her sisters to clean the room.

Cinderella promised her sisters to clean the room.

Speakers of English know that in the first sentence her sisters are going to clean the room while in the second sentence, Cinderella is going to clean the room. There is no overt signal in the sentence that tells us the relation of the infinitive phrase to clean the room to the rest of the sentence. We know the difference because we know the kinds of complements that must follow the verbs order and promise: we order someone to do something, but we promise someone that we will do something ourselves.

Another example of the same point is in the pair of sentences

John started to answer the phone.

John stopped to answer the phone.

In the first example, to answer the phone is the complement to the verb start. That is, it is a necessary part of the sentence. If it is deleted, the sentence becomes ungrammatical in the intended meaning: *John started (John started to do what?). In the second example to answer the phone is an optional adverbial element that tells why John stopped. Again, there is no signal in the sentence that tells us how to interpret the function of to answer the phone. We are able to because we have a knowledge of the relation between parts of a sentence. In this case, we know that the verb start takes an infinitive complement and that the verb stop does not.

The third way that our knowledge of language is manifested is through our ability to perceive the grammatical relation between different sentences. We have already had one example of a systematic grammatical relation between statements and tag questions. There are numerous other examples of pairs of sentences which have a systematic grammatical (and semantic) difference. For example, for every statement, there is a corresponding yes-no question (example: Today is Tuesday--Is today Tuesday?), and a question which asks for information (example: Today is Tuesday--What is today?). For every grammatical positive statement, there exists a corresponding negative statement using not (example: Today is Tuesday--Today is not Tuesday). For every neutral or

unemphatic statement there is a corresponding emphatic statement the asserts the truth-value of the statement (example: Today is Tuesday--Today IS Tuesday!). That the emphatic form is more than just a matter of stress is seen with a sentence that does not use the verb be or an auxiliary verb (example: We won the game--We DID win the game! Here the emphatic form requires the addition of the verb do).

There is another type of grammatical relationship called paraphrase. In the examples above, there is a systematic difference in meaning between the pairs of sentences. In a paraphrase relationship, the two related sentences have the same meaning. A good example of a paraphrase relationship is in the two-word verb construction. A two-word verb is a verb plus preposition unit that makes up one lexical word. Look over is a two-word verb which means "examine."

The examiners looked over the books.

With some two-word verbs it is possible to move the preposition to a position after the object. Look over is such a verb:

The examiners looked the books over.

Thus the two sentences

The examiners looked over the books

The examiners looked the books over

are in a paraphrase relationship with each other: they both mean the same thing and they are related to each other in a systematic grammatical way.

The active-passive relationship is one of the most complex paraphrase relations in English. For example, for the active sentence

John took the message

there is the corresponding passive sentence

The message was taken by John.

The active-passive paraphrase relationship is particularly interesting because of the great difference in form between them. Quite literally, the active and passive have only one grammatical element in common: they have different subjects, different verb tenses, and different objects; the only shared element is the main verb (take in the case of the example above). Despite their striking formal differences, it is clear that the active and passive have the same basic meaning and that they are related in a systematic way.

The final example of the relationship between two sentences is almost the opposite of the paraphrase relationship. In the paraphrase relationship, two different sentences have the same meaning. In this new relationship, one apparent sentence has two different meanings. In other words, it is an ambiguous sentence. An ambiguous sentence is really two different sentences that happen to look exactly alike in the same way that to and two are different words that happen to sound alike. The classic example of an ambiguous sentence comes from Chomsky's Syntactic Structures (p. 88). Chomsky's example is the phrase the shooting of the hunters which means either (1) the hunters shot something or (2) someone shot the hunters. The interesting thing about this example is that both meanings have exactly the same grammar: the is an article, shooting is a gerund, of is a preposition, and hunters is a noun.

One possible explanation would be to claim that this particular sequence of Article--gerund--of--article--noun is inherently ambiguous in the same way that read is inherently

ambiguous as either the present tense or the past tense written form of the verb. Chomsky shows that this cannot be the case by giving exactly parallel constructions which are not ambiguous:

the growling of the lions

the raising of the flowers.

Moreover, the growling of the lions is similar to the first meaning of the shooting of the hunters (lions growl and hunters shoot) while the raising of the flowers is similar to the second meaning (someone raises the flowers and someone shoots the hunters).

The trick about this group of gerundive phrases is that the noun at the end represents either an original subject of a sentence (as in Lions growl) or an original object (as in [Someone] raises flowers). Chomsky's the shooting of the hunters is ambiguous because hunters can be either the original subject (Hunters shoot) or the original object ([Someone] shoots the hunters). The other two phrases are not ambiguous because lions cannot be an object (*[Someone] growls lions) and flowers cannot be a subject (*Flowers raise [something]).

We have now seen some examples of all three ways in which knowledge of our language is manifested: by our ability to distinguish grammatical sentences from nongrammatical sequences, by our ability to perceive tacit relations within a sentence, and by our ability to perceive grammatical relations between sentences. All three abilities imply the same thing: knowledge of a language entails the knowledge and use of a complex set of grammatical abstractions that cover the language. How this knowledge is acquired and how the brain uses it is unknown. Chomsky's goal, however, was much more limited. He was interested in characterizing this knowledge. The device he invented to do this was a transformational grammar. (The term grammar here refers how words are arranged to form sentences. The pronunciation of the sentences belongs to the area of linguistics known as phonology. Transformational phonology will be discussed below.)

The exact form of this grammar and how much knowledge it is expected to account for is controversial. However, for our purpose, it is sufficient to recognize two sets of rules in the grammar. The first set is called the phrase structure rules. These rules produce elementary Dick-and-Jane sentences. The second set of rules, the transformational rules, combines the elementary sentences produced by the phrase structure rules, collapses them together, and "transforms" them into normal sentences. Perhaps a helpful analogy is to think of the sentences produced by the phrase structure as basic chemical structures. The transformational rules are the rules of chemistry which govern the ways in which the basic structures are combined and reshaped to form more complex compounds.

In his book Aspects of the Theory of Syntax Chomsky coined the terms "deep" and "surface" to talk about the relations between the two sets of rules in a transformational grammar. The surface structure of a sentence is the part of speech analysis of the sentence as it appears. The deep structure of the same sentence, however, is a listing of all the elementary sentences produced by the phrase structure rules that are necessary to account for the surface sentence. The deep sentences are covered into the surface sentence by the transformational rules. Thus the relation between the deep and surface structures is a "before" and "after" relation: the deep structure is before the transformational rules have been applied, and the surface structure is after they have been applied.

The terms deep and surface are especially convenient for talking about paraphrase and ambiguity. In a paraphrase relation, the two related surface sentences come from a single deep structure. The surface sentences differ because they have had different transformational rules applied in the process of their derivation. To take an obvious example,

The examiners looked over the books

The examiners looked the books over

have different word orders because the second sentence has been derived with an optional transformational rule that moves the preposition after the noun. In the relation between the active and passive, the passive has had a whole battery of transformational rules applied to it that have not been applied to the passive.

The ambiguous sentence is just the opposite. Ambiguity results when two different deep structures end up producing exactly the same surface structures. This points up the fact that most deep structures can come to the surface in a variety of slightly different forms. Some of these forms may happen to be identical with forms derived from a different deep structure. If this happens, we then have an ambiguous sentence.

As an example of how a transformational grammar deals with ambiguity, let us take the ambiguous phrase the shooting of the hunters. As pointed out above, there appear to be two different deep structure sentences underlying this one surface phrase: (1) The hunters shot something and (2) Someone shot the hunters. The phrase the shooting of the hunters is sometimes called a nominalization in transformational terms because it is a sentence that has been turned into a noun phrase, that is, the nominalization can be put inside another sentence. For example, in the following sentence

The shooting of the hunters surprised us

the nominalization serves as the subject. In the following sentence

We heard the shooting of the hunters

it serves as the object.

There are many ways that an underlying sentence can be nominalized. For example, the hunters shot something can be changed into the hunters' shooting of something or the hunters' shooting something, or even the fact that the hunters shot something. However, to account for the ambiguous form, we need first to delete the object of the original sentence by an optional transformational rule, changing the hunters shot something into the hunter's shot. This new sentence then nominalizes into the shooting of the hunters.

The other underlying sentence something shot the hunters requires other transformations before it can be nominalized to produce the ambiguous form. First, the active sentence someone shot the hunters must be transformed into the passive sentence the hunters were shot by someone. The agent by someone is next deleted by a second transformational rule, producing the hunters were shot. When this sentence is nominalized, one of the resulting forms is the ambiguous phrase the shooting of the hunters. The nominalization rule applies equally to active and passive sentences, hence the ambiguity of the phrase the shooting of the hunters. Notice that in both derivations, the ambiguous form could only be produced by deleting the other noun in the underlying sentence, the original object in the first underlying sentence and the original subject in the second. Thus in the ambiguous phrase, you cannot tell whether hunters is the subject or object of the verb shoot.

Up to this point we have been concerned only with grammar. When we turn to phonology and the relation between grammar and phonology we see perhaps the greatest difference between transformational grammar (now using grammar in a broad sense including phonology) and the theory it supplanted, structural linguistics. In structural linguistics, the investigation of language moved from the most concrete to the least concrete, in other words, from phonology to a consideration of meaning. We have seen that in syntax, a transformational grammar moves in just the opposite direction: from abstract (i.e., the deep structure) to concrete (i.e., the surface structure).

Structural linguistics and transformational grammar take opposite scientific approaches. Structural linguistics is Baconian in its insistence on the primacy of data and in its distrust of generalizations and abstractions. Transformational grammar, on the other hand, is basically a mathematical model of language that works deductively from abstractions down to particular cases.

In transformational phonology the same movement from abstract to concrete is preserved. The abstract starting point for the phonological rules is the output of the transformational rules in the grammar--the surface structure of the sentence with all the words spelled in the usual way and with all the information about each word's part of speech and how the words interrelated to make up the grammar of the whole sentence. The surface structure plays a double role: from the standpoint of syntax, the surface structure is concrete (compared to the abstractions in the deep structure), but from the standpoint of phonology, the surface structure is abstract (compared to the concreteness of pronunciation). Thus again the output for one set of rules serves as the input for the next set of rules. The output of the phonological rules is a phonetic representation of the pronunciation of the surface structure sentence that was the original input.

It might be helpful in seeing how the two theories relate phonology to grammar by giving their different analysis of an actual sentence. The following sentence is ambiguous:

John fed her dog biscuits.

Either her is possessive, that is, John fed dog biscuits to her dog, or her is the indirect object, that is, John fed dog biscuits to her. When the sentence is said aloud, one interpretation or the other must be picked since the two interpretations have different pronunciations. If the first meaning is picked, there is a slight pause after dog, and biscuits has a higher stress than dog. In the second meaning, there is a pause after her, and dog biscuits is pronounced as a compound noun, that is, with higher stress on dog than on biscuits. The two theories give completely different interpretation to these facts. The structural linguist would point out that since the pronunciation disambiguates the two sentences, the information from pronunciation (i.e., phonology) is necessary to understand the meaning of sentences. In other words, grammar must follow and be dependent on phonology. The transformational grammarian, however, would argue that we know how to pronounce the ambiguous sentence in two different ways because we know that it is really two different sentences, i.e., comes from two different deep structures. The fact that the two different surface sentences are pronounced differently has nothing to do with our interpretation of them, nor does it explain how we knew how to pronounce either sentence to begin with.

The transformational view is that you can only embody in speech what you can analyze on the level of surface structure. This is not to say that you can only pronounce those sentences that you can understand. It is perfectly possible to open a philosophy book and correctly read a sentence aloud without understanding its meaning. You can read it aloud because you know all the words and their grammatical relation to each other, i.e., the surface structure.

There are two sets of rules that convert the surface structure into a phonetic representation of actual speech. One set assigns an overall stress contour to the entire sentence. For example, this set of rules would have to make different stress assignments for the two different meanings of black + board: if black is an adjective, board will receive primary word stress; however, if blackboard is a compound noun (information contained in the surface structure), then black receives primary word stress.

The second set of rules deals with the pronunciation of individual words, including placement of stress, reduction and shifting of vowels, and the relation of the word to other members of its word-family. For example, atom has the primary word stress on the first syllable, but atomic has it on the second. Atomic is an adjective derived from the noun atom by means of the derivational suffix -ic. The shift in stress from the first

syllable in atom to the syllable before the derivational suffix in atomic is part of a larger, regular pattern; for example: irony-ironic, telegraph-telegraphic, photography-photographic, algebra-algebraic etc. Moreover, the shift of stress has affected the quality of the vowels. Atom has a distinct low-front vowel in the first syllable but an uncontrastive vowel in the second vowel. In atomic the position of the distinct and uncontrastive vowels reverse: the distinct vowel is now in the second syllable while the uncontrastive is in the first syllable.

The beginning point for the set of rules that governs word pronunciation is the normal orthographic spelling for the word. Chomsky and Halle take this as their initial abstract input. The rules apply to this form and convert it into a representation of the word's pronunciation. The spelling of a word represents information about the word family it belongs to. With that knowledge, Chomsky and Halle's rule set is able to correctly assign a pronunciation to the word. Thus the spelling atom serves as the ideal abstract (or underlying) representation for both atom and atomic: the spelling provides the information for determining the nature of the vowel in the stressed syllable no matter which syllable gets the word stress. In other words, the spelling underlies both pronunciations.

To the structural linguist the ideal writing system would provide a one-to-one match between the sound and the spelling, i.e., the same sound would always be spelled the same way. In transformational phonology the ideal writing system would always spell the same word the same way, no matter how it was pronounced. Chomsky and Halle's (1968) basic assumption is that once a native speaker of English can correctly assign part of speech to a word and can fit the word into its word family, he will know how to pronounce it. This knowledge is characterized in terms of a set of phonological rules starting with the surface structure in normal orthographic spelling. Here is Chomsky and Halle's comment about their use of orthographic spelling as the abstract input for their rules:

> There is, incidentally, nothing particularly surprising about the fact that conventional orthography is, as these examples suggest, a near optimal system for the lexical representation of English words. The fundamental principle of orthography is that phonetic variation is not indicated where it is predictable by general rule. Thus, stress placement and regular vowel or consonant alternations are generally not reflected. Orthography is a system designed for readers who know the language, who understand sentences and therefore know the surface structure of sentences. Such readers can produce the correct phonetic forms, given the orthographic representation and the surface structure, by means of the rules that they employ in producing and interpreting speech. It would be quite pointless for the orthography to indicate these predictable variants.... A system of this sort is of little use for one who wishes to produce tolerable speech without knowing the language--for example, an actor reading lines in a language with which he is unfamiliar. For such purposes a phonetic alphabet, or the regularized phonetic representations called "phonemic" in modern linguistics, would be superior. This, however, is not the function of conventional orthographic systems (1968, p. 49).

To summarize, in both grammar and phonology, the transformational approach works by applying a set of rules to an abstract, underlying form. In the area of grammar, the underlying forms are produced by the phrase structure rules, and are called deep structures. The deep structures are converted into surface structures by the application of the transformational rules. In the area of phonology, the grammatical information contained in the surface structure provides the abstract, underlying forms for the determination of sentence stress. The forms are given their relative sentence stress by a set of phonological rules. Finally, the placement of word stress in polysyllabic words and the systematic changes in pronunciation that go with stress are determined by a second set of phonological rules that apply to the abstract, underlying form provided by the normal English orthographic spelling.

We will now turn to a brief discussion of cognitive psycholinguistics. Of greatest interest to us is the way in which cognitive psycholinguistics offers a new alternative to what might be loosely called classical behaviorist learning theory. Within the classical view of behaviorism, there are many different models of how learning takes place, and indeed, different definitions of what learning is. One model (Pavlov's classical conditioning) defines learning as a demonstration of the learner's ability to associate. To take an example from language learning, the ability of a native speaker of Japanese to give Japanese equivalents for English words is a demonstration of his learning of English vocabulary, i.e., he has learned to associate English and Japanese words.

A second model (that of C. L. Hull) looks at learning primarily in terms of habit strength. An example here would be the learner's struggle to develop new habits of pronunciation for the language he is acquiring. Part of his difficulty is the interference of the well established habits in his native language with his attempts to establish new habits for the foreign language. A third model, and one that is particularly interesting to language teachers, is B. F. Skinner's instrumental learning. Instrumental learning differs from Pavlov's classical conditioning in that instrumental learning alters the learner's behavior by rewarding the learner's response, while Pavlov's conditioning caused learning to take place by the simple juxtaposition of two stimuli. For Skinner, learning is the mastery of a new set of accomplishments which can be demonstrated on demand. An example would be the ability of a language learner to produce sentences in the new language appropriate to the situation.

Despite real differences between the models described above, they have three fundamental points of similarity: (1) All models agree that the principles of classical behaviorist learning theory can account for all forms of human learning, even language, even though the models were developed in tightly controlled laboratory experiments often involving relatively lower-order animals. In other words, classical behaviorist learning theory is a universal explanation for all learning. (2) All models describe learning in terms of some change in the learner's overt behavior, i.e., learning implies some measurable action on the part of the learner. (3) All models agree that learning takes place because of some change in the learner's environment, though the models disagree on what the key variable for the charge is: stimulus, response, reinformant, number of trials etc.

Cognitive psycholinguistics is not a general challenge to all of classical behaviorist learning theory. There are many types of learning, even in humans, that classical behaviorist learning theory gives a convincing account of. The main difference between cognitive psycholinguistics and classical behaviorist learning theory stems from the special status that the cognitive psycholinguists give to the learning capacity of the human brain in general and to its capacity to acquire language in particular. The cognitive psycholinguists claim that the human capacity for language is an innate, species-specific quality of the mind, and consequently, must be acquired in species-specific ways. In other words, the cognitive psycholinguists deny the first of the three points shared by all models of classical behaviorist learning theory, namely, that their theories are a universal explanation for all learning.

Chomsky has argued that classical behaviorist learning theories have concentrated on an organism's learning what is not intrinsic to the needs of the organism's species, for example, Pavlov's conditioning a dog to salivate at the sound of a bell or Skinner's conditioning a pigeon to play ping-pong. Chomsky feels that these studies shed little light on how organisms acquire species-specific behavior--behavior that is intrinsic to the species. As Chomsky puts it:

> The problem of mapping the intrinsic cognitive capacities of an organism and identifying the systems of belief and the organization of behavior that it can readily attain should be central to experimental psychology. However, the field has not developed in this way. Learning theory has, for the most part, concentrated on what seems a much more marginal topic, namely, the question of species-independent

> regularities in acquisition of items of a "behavioral repertoire" under experimentally manipulable conditions. Consequently, it has necessarily directed its attention to tasks that are extrinsic to an organism's cognitive capacities--tasks that must be approached in a devious, indirect, and piecemeal fashion (1965, pp. 56-57).

The following train of reasoning is implicit in the cognitive psycholinguist's rejection of the classical behaviorist learning theory's claim to a universal explanation: (1) Human language is literally species-specific, i.e., it is profoundly different from any kind of animal communication (see Hewes 1973, pp. 6-7 for a survey of the literature on the difference between human language and primate communication). (2) The human brain has its own rich, innate (i.e., genetically determined) capacity that makes language learning "natural" for humans and impossible for other species. In Aspects of the Theory of Syntax, Chomsky briefly characterizes what this innate capacity for language must consist of:

> A child who is capable of language learning must have
>
> (i) a technique for representing input signals
>
> (ii) a way of representing structural information about these signals
>
> (iii) some initial delimitation of a class of possible hypotheses about language structure
>
> (iv) a method for determining what each such hypothesis implies with respect to each sentence
>
> (v) a method for selecting one of the (presumably, infinitely many) hypotheses that are allowed by (iii) and are compatible with the given primary linguistic data (1965, p. 30).

(3) The concluding assumption, following from the first two, is that the human capacity for language acquisition is unique and cannot be described in terms of a universal explanation provided by classical behaviorist learning theory.

It is difficult to imagine anyone challenging the first assumption above. For a particularly interesting discussion on the relation between human language and animal communication and the whole question of the evolution of language, see Chapter Six, "Language in the light of evolution and genetics," in Lenneberg's (1967) Biological Foundations of Language. Investigations of children's acquisition of their first language and clinical studies of impared children have strongly supported the second assumption. For surveys of recent research on normal acquisition of first language, see Dale 1972, McNeill 1970, Reed 1971, and Slobin 1971. Lenneberg 1967 is still the classical work on language in impared children.

However, there is virtually no independent evidence that bears on the third and concluding assumption. That is, even granted that human language is possible only because of the genetic make-up of the human brain, that does not of itself prove that human acquisition of language must take place in a unique way. Moreover, it is hard to imagine what kind of evidence would independently prove (or disprove) that it does. MacCorquodale in his article on Chomsky's (1959) review of Skinner's Verbal Behavior (1957) argues, in effect, that the principles of behaviorist learning are empirically well established across many species, each with its own genetic pecularities. Thus the burden of proof is on the cognitive psycholinguist to show that human language learning requires a special set of learning laws for its own. As MacCorquodale (1970) puts it:

> There is no lethal incompatibility or even mild inconsistency between the principles of genetic evolution and the principle of reinforcement. Reinforcement has many necessary points of contact with genetics. Reinforceability is itself a genetically determined characteristic; organisms are simply born reinforceable. They have evolved that way. The fact that organisms behave at all is due to genetic determination. Stimulus generalization and response induction are genetically determined characteristics (1970, p. 93).

Nevertheless, the mounting evidence supporting the cognitive psycholinguists' first two assumption make the third assumption a serious challenge to one of the basic tenets of classical behaviorist learning theory.

The second point that all models of classical behaviorist learning theory shared was that learning could only be described in terms of some change in the learner's overt behavior. Chomsky has argued the opposite point, at least as far as language is concerned, in his distinction between competence and performance. Competence is a person's linguistic capacity. Performance is what he does with that capacity. Performance, i.e., actual observed behavior, is not the same thing as competence because performance is partly the result of factors that have nothing to do with the person's underlying competence. For example, performance has both accidental limitations, e.g., slips of the tongue, false starts, etc., as well as systematic differences from competence, e.g., memory limitations. In Chomsky's "Formal discussion of 'The Development of Grammar in Child Language' by Wick Miller and Susan Ervin," (Chomsky, 1964), he analogizes linguistic competence and performance with competence and performance in mathematics: the fact that we know how to multiply (what we might call mathematical competence) does not mean that we will not make mistakes (accidental limitations) or can multiply two long numbers together without pencil and paper (memory limitations) in our actual performances of multiplication.

Thus for the cognitive psycholinguist, the crucial part of language learning is the learner's development of linguistic competence. However, this development takes place, as it were, behind the scenes. The learner's actual performance gives us only hints and suggestions about his development of competence. Moreover, the learner is never presented with models of competence to emulate; he is only exposed to instances of performances. As Chomsky puts it:

> The problem for the linguist, as well as for the child learning the language, is to determine from the data of performance the underlying system of rules that has been mastered by the speaker-hearer and that he puts to use in actual performance. Hence, in the technical sense, linguistic theory is mentalistic, since it is concerned with discovering a mental reality underlying actual behavior. Observed use of language or hypothesized dispositions to respond, habits, and so on, may provide evidence as to the nature of this mental reality, but surely cannot constitute the actual subject matter of linguistics, if this is to be a serious discipline (1965, p. 4).

The third point that all models of classical behaviorist learning shared was that learning took place because of some change in the learner's environment. Cognitive psycholinguists argue that, on the contrary, a child's acquisition of his first language is largely an internal affair because the child must create for himself an abstract set of grammatical rules that cover the data he is exposed to. As Chomsky puts it in his "Review of Skinner's Verbal Behavior":

> The child who learns a language has in some sense constructed the grammar for himself on the basis of his observation of sentences and non-sentences (i.e., corrections by the verbal community). Study of the actual observed ability of a speaker to distinguish sentences from

> non-sentences, detect ambiguities, etc., apparently forces us to the conclusion that this grammar is of an extremely complex and abstract character, and that the young child has succeeded in carrying out what from the formal point of view, at least, seems to be a remarkable type of theory construction. Furthermore, this task is accomplished in an astonishingly short time, to a large extent independently of intelligence, and in a comparable way by all children. Any theory of learning must cope with these facts (in Jakobovits and Miron, 1967, pp. 170-171).

In other words, the cognitive psycholinguist's position is that the child is born with a genetically determined knowledge of how natural language work and with a special ability at hypothesis formation and testing to determine which hypothesis is correct. As might be imagined, there is little direct evidence to support this position except for (1) the amazing speed with which learners acquire their first language and (2) general patterns in the sequence and rate that language elements are learned (for details, see the survey works referred to on page). However, there is considerable negative evidence accumulating against the environmental shaping of children's language development through (1) imitation of adult models, (2) parental correction, or (3) need to communicate. In a recent article, Roger Brown (1973) discussed these topics and comes to this conclusion:

> In sum, then, we presently do not have evidence that there are selective social pressures of any kind operating on children to impel them to bring their speech into line with adult models. It is, however, entirely possible that such pressures do operate in situations unlike the situation we have sampled, for instance, away from home or with strangers. A radically different possibility is that children work out rules for the speech they hear, passing from levels of lesser to greater complexity, simply because the human species is programmed at a certain period in its like to operate in this fashion on linguistic input (pp. 105-106).

Whether or not the acquisition of human language proves to be an exception to the generalizations of classical behaviorist learning theory, only time will tell. Clearly, however, transformational grammar and cognitive psychology have raised issues that are not going to go away.

It might be useful to have here a brief summary of the key differences between classical behaviorist learning theory and cognitive psycholinguistics:

Classical behaviorist learning theory	Cognitive psycholinguistics
(1) All forms of learning are basically alike.	(1) Language learning is a species-specific form of behavior and takes place in species-specific ways.
(2) Learning can only be described in terms of overt behavioral changes.	(2) Language learning can only be described in terms of the growth of linguistic competence (as opposed to overt performance).
(3) Learning takes place through some change in the learner's environment.	(3) Language learning is an act of individual creation through hypothesis creation and testing.

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SOCIOLINGUISTIC ASPECTS OF WORD BORROWING

MASANORI HIGA
RESEARCH ASSOCIATE
CULTURE LEARNING INSTITUTE
EAST-WEST CENTER

Introduction

For various reasons different cultures come in contact with each other and interact. The conditions and results of such interaction are often studied and discussed in terms of culture diffusion, acculturation, culture exchange or culture learning. At the abstract level, one culture may be influenced by another culture on such matters as religion, philosophy and political ideology. At the concrete level, things related to food, clothing and shelter may be learned by one culture from another. At both levels, one culture may learn more from another than vice versa, depending upon the conditions under which the two come in contact. In order to determine the directionality, content and amount of culture learning between two given cultures, social scientists look for tangible evidence of the interaction between them. The purpose of this paper is to recognize word-borrowing as one such evidence and discuss its sociolinguistic aspects.

Although the phonological aspect of word-borrowing is often studied (e.g., Josephs, 1970; Schutz, 1970), its socio-cultural aspects have rarely been analyzed systematically. One major reason for this seems to be that not all of what is learned by one culture from another and not all of the process of word-borrowing are reflected in borrowed words. For example, the names of new things and new concepts may be directly borrowed or they may be translated into the language of a borrowing culture. If word-borrowing is a more or less random and unsystematic process as Gleason (1955) stated, then no systematic study may be possible. However, several past studies (e.g., Haugen, 1950; Higa, 1970; Umegaki, 1963) have shown that there are certain tendencies in word-borrowing and borrowed words which seem to indicate the directionality, content and amount of culture learning between two given cultures to a significant extent.

The study of word-borrowing, linguistic or sociolinguistic, has not been popular in the United States, probably because the amount of word-borrowing in modern American English has been relatively small. It may be that American culture has had more to give than receive in its contact with other cultures. Japanese culture, on the other hand, has been learning so much from other cultures that the use of borrowed words in Japanese is conspicuous. Through surveys of what these words and their foreign origins are, inferences are often made as to the nature of Japanese culture vis-a-vis other cultures (e.g., Umegaki, 1963).

Just as the study of the phonological aspect of borrowed words has been fruitful in detecting and testing the phonological rules of the language in which they are used, so may be the sociolinguistic analysis of word-borrowing in studying the nature and process of culture learning. In an attempt to make a systematic sociolinguistic analysis of word-borrowing in any given language, the following questions may be asked: (1) Under what circumstances are words borrowed by one language from another? (2) Who are the borrowers of words? (3) Why are foreign words borrowed? (4) How are they borrowed? (5) What are the words that are borrowed? (6) What is the extent to which borrowed words can be used? The discussion below deals with these questions.

Circumstances Under Which Word-Borrowing Takes Place

In general, no word-borrowing takes place unless two cultures and their languages come in contact with each other somehow. The directionality of word-borrowing is understandably predictable. When word-borrowing takes place, it is not random in the sense that its directionality and amount vary from one language to another often as a function of cultural, economic or military advancement and dominance. Mutual borrowing or non-borrowing takes place when two cultures in contact are equally dominant or not dominant, or when their dominance-subordination relationship is not clearly established (see Diagram 1). This is almost a theoretical case, but the cultural relationship between America and Russia in recent years may be considered as an example in this category. There seems to have been little word-borrowing between these two super-powers of the world since the end of the second world war. If one is more dominant or advanced than the other, the directionality of culture learning and subsequent word-borrowing is not mutual but from the dominant to the subordinate (see Diagram 2). Here we find many examples including the relationship between American culture and Japanese culture. Japanese has borrowed a great number of words from American English but not vice versa.

A third case is where a subordinate culture comes in contact with a dominant culture within the same country or within the same political unit (see Diagram 3). This is a deviation of the second case mentioned above. The contact between American culture and the cultures of various immigrants to America is a good example. Their relationship is the relationship between a main culture and its subcultures. Such languages of the immigrants to America as Japanese, Chinese, Italian, German and Swedish have borrowed words from American English much more heavily than vice versa. As has been shown in the case of Japanese spoken in America (Higa, 1970), the English words that these languages have borrowed in America seem to be different from those that have been borrowed by the same languages in their native countries. This indicates that the third case is also worth analyzing.

A fourth case is a deviation of the third case. When there are a main culture and more than two subcultures within the same country, the subcultures borrow words heavily from the main culture but among the subcultures word-borrowing or non-borrowing is mutual (see Diagram 4). For example, both Chinese and Japanese spoken in the United States use a great number of words borrowed from American English but there is little word-borrowing between the Chinese and the Japanese.

Diagram 1. The directionality of borrowing between two equally dominant or subordinate cultures (D_1 and D_2, or s_1 and s_2).

Diagram 2. The directionality of borrowing between a dominant culture (D) and a subordinate culture (s).

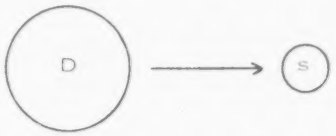


Diagram 3. The directionality of borrowing between a dominant culture (D) and a subordinate culture (s) within the same country.

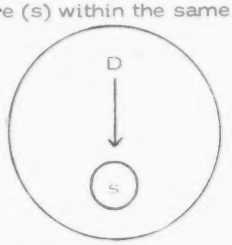
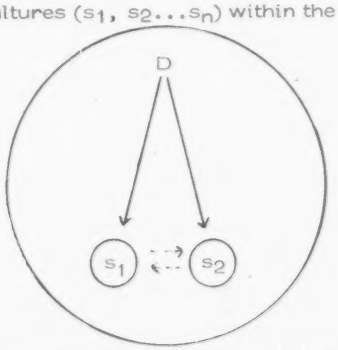


Diagram 4. The directionality of borrowing among a dominant culture (D) and subordinate cultures (s_1, $s_2 \ldots s_n$) within the same country.



There may be more cases or deviations than just these four, but these seem to represent typically the circumstances under which cultures come in contact and word-borrowing takes place. Cultural dominance, which is highly correlated with economic and military dominance, is often defined in terms of achievements in arts, sciences and technology and, thus, the dominance-subordination relationship between two cultures that come in contact with each other can be determined almost immediately. Very roughly speaking, in modern times British, French, German, American and Russian cultures have been dominant and the other cultures of the world have been subordinate to these dominant ones either directly or indirectly. If the term subordination is too sensitive to use in discussing cultural relations, we may rephrase the preceding statement by saying that British, French, German, American and Russian cultures have been influencing the other cultures of the world in modern times. In terms of word-borrowing, English, French, German and Russian have been dominant languages and the other languages have been borrowing words from these. The relative dominance of each of these cultures and languages in a given subordinate culture seems to be reflected in its linguistic borrowing. For example, if one country--the language of that country, to be specific--has borrowed more words from French than from Russian, the obvious inference is that for that country France has been more influential than Russia in its culture learning.

The positive correlation between the amount of culture learning and the amount of linguistic borrowing must still be regarded as a hypothesis rather than a fact. There are two major reasons for this reservation. One, which was mentioned earlier, is that

not all of what is learned by one culture from another is reflected in borrowed words. The other is that there is no methodology available for measuring the amount of learning by one culture from another. It is doubtful that such a methodology will ever be worked out. Unlike economic growth which can be measured in terms of gross national product and military development which can be measured in terms of manpower and weapons, culture learning is difficult to quantify. At present, in order to infer the amount of learning by one culture from another, we refer to qualitative descriptions of the things and concepts that have been learned.

However, if we are ever to discuss any given culture quantitatively, the most readily available and measurable variable seems to be the size of the vocabulary of the language of that culture. Here the assumption is that everything cultural is linguistically coded. Thus, the richer a culture, the richer the vocabulary of its language. A culture whose vocabulary has 100,000 words can be assumed to be richer and more dominant than another culture whose vocabulary has only 10,000 words. By the same token, the growth or development of a given culture in any given year may be measured by counting the number of new words that have been added to its vocabulary in that year. This kind of measurement is certainly too simple, but if it can reasonably accepted as one readily available means of inferring the amount of culture, just like the amount of knowledge, and its growth, then a statistical formula for computing what may be called "gross cultural growth" should be worked out easily.

As mentioned above, although the number of borrowed words cannot be regarded as the absolute or exact amount of learning by one culture from another, it may be considered as a relative index of cultural growth and culture learning in two different ways. For example, if a given culture has increased its vocabulary by 1,000 words in a given year and if 500 of these are foreign loanwords, we may infer that at least 50% of the growth of that culture in that year was due to its contact with foreign cultures. Also, if 70% of these loanwords has been borrowed from American English and the rest from several other languages, the relative dominance of American culture for that culture may easily be inferred. That is, the assumption is that the relative dominance of a given culture vis-a-vis another culture can be determined by the directionality and amount of word-borrowing between the two.

The statistical datas on borrowed words in Japanese provide us with convincing evidence that the above-mentioned assumption is valid. Japan is regarded as the first country in Asia that was industrialized and Westernized. However, until the 19th century the country that had influenced Japan culturally for centuries was China. These cultural contacts seem to be recorded or reflected in the words that Japanese has borrowed from Chinese and Western languages. The following are the datas that were reported by the Japanese National Language Research Institute (1964) that conducted vocabulary surveys of 90 different kinds of Japanese magazines published between 1950 and 1956:

TABLE 1
Proportions of Languages in the Japanese Vocabulary.

Language	% of the Total Vocabulary
Japanese	36.7
Chinese	47.5
Other Languages	9.8
Hybrids	6.0
	100.0%

According to these statistics, close to one half (in types rather than tokens) of the contemporary Japanese vocabulary is of Chinese origin. The Japanese writing system

itself originated in China. The words that are indigenously Japanese constitute only about 37%. By "other languages" are meant mostly European languages and the words borrowed from these amount to almost 10%. The hybrids, which account for 6% of the Japanese vocabulary used in contemporary Japanese magazines, are those Japanese words that are made up of elements from different languages.

Of those words that have been borrowed from "other languages," as the following datas show, about 81% is of English origin. However, since American English and British English are not separately categorized in this survey report, we have no way of knowing from this which of the two has contributed more than the other to the growth of the Japanese vocabulary.

TABLE 2
Proportions of Languages in
Western Loanwords in Japanese

Language	% of the Total Western Loanwords	% of the Total Japanese Vocabulary
English	80.8	7.92
French	5.6	0.55
German	3.3	0.31
Italian	1.5	0.15
Dutch	1.3	0.13
Russian	0.8	0.08
Portuguese	0.7	0.07
Spanish	0.7	0.07
Others	5.3	0.52
	100.0%	9.80%

The percentage figures shown in Table 2 do not represent the actual amount of culture learning, but a review of the history of Japan's contact with the countries and cultures that these languages represent indicates that the figures may be considered as the indexes of relative dominance among these Western cultures vis-a-vis Japanese culture or as the indexes of relative influence of these Western cultures upon Japanese culture. However, there is a "scientific need" to work out a methodology to validate this observation which is still impressionistic.

Unfortunately, since similar datas on Japanese loanwords popularly used in these Western languages are not available, it is not possible to show empirically the directionality of word-borrowing between these languages and Japanese. Randomly available datas, however, indicate that only a few Japanese words like geisha, sake, sukiyaki and harakiri have been borrowed by these languages and the directionality of borrowing is clearly from the West to Japan. If the assumptions and observations presented above are correct, then one may predict that, as Japan keeps increasing its contact with other countries as an industrial power, the number of Japanese loanwords in their languages will increase significantly and that the present lopsided borrowing by Japanese will slow down.

Agents, Motives and Methods of Word-Borrowing

The etymologies of foreign loanwords are usually well described in dictionaries of loanwords, but reports on who the original borrowers were of such loanwords are very scarce. Studies of first borrowers are needed so that at least part of the process of learning between two cultures may be made clear. In general, it is known that those who come in contact with and acquire new knowledge from foreign cultures use foreign words

in an attempt to disseminate their new knowledge. It seems that, unless these people have some kind of leadership or the knowledge of things that they want to introduce have practical relevance to the life of their fellow countrymen, they are not successful in having their loanwords accepted commonly. In the case of Japan, the original borrowers of foreign words seem to have been, and still seem to be, scholars, professionals, artists, journalists and skilled workmen like cooks and tailors.

It is interesting to note that borrowed words introduced by skilled workmen and used in such practical areas as cooking and dressmaking are pronounced in close approximation to their original pronunciations as compared to those introduced by intellectuals. Sometimes the same foreign words are borrowed by these two groups of people with different pronunciations. For instance, such sewing terms as cotton, chalk and machine (=sewing machine) have been borrowed by Japanese dressmakers from English and are pronounced as /katan/, /čako/ and /mišin/, but outside of the dressmaking circle their pronunciations are /koqton/, /čooku/ and /mašiin/. This phenomenon indicates that intellectuals tend to borrow foreign words through the eye, while others borrow through the ear.

There seem to be several reasons for borrowing foreign words. According to Weinreich (1953), one reason is linguistic innovation. When new things or concepts are learned by one culture from another, there arises a linguistic need to name them in its own language. It may innovate new words to name them, or it may directly borrow ready-made foreign words. What words are directly borrowed and what words are not will be discussed later in this paper. Another reason for borrowing is considered to be social prestige. People who want to exhibit their familiarity with foreign cultures, especially so-called prestigeous cultures, tend to use foreign words as proud evidence of such familiarity.

Reasons for word-borrowing vary as circumstances under which people come in contact with foreign cultures vary. Visitors and immigrants to foreign countries tend to use borrowed words in their native languages to show their progress of acculturation. According to this author's survey (Higa, 1970), in immigrant communities like the Japanese community in Hawaii, borrowed words play an important role in creating a new dialect through which the members of the community can identify each other as belonging to the same community. English words are abundantly borrowed in the Japanese spoken in Hawaii, but they are used mostly among the members of the Japanese community. When these members speak to visitors from Japan, they try to speak as much standard Japanese as possible without using borrowed English words. Among themselves, as will be discussed later, they tend to borrow English words even when there are Japanese equivalents and there is no linguistic need to borrow foreign words. Regarding a social need for a dialect, Hertzler (1965, p. 382) made the following statement:

> "Whenever social circumstances lead to the formation of a distinct group within the whole body of society, or of distinct common characteristics and functions for a category of the population, the people involved will tend to, or deliberately devise, speech forms of their own."

In the case of immigrants, their need for a dialect is obviously coupled with their desire to show the progress of their acculturation.

When words are borrowed by one language from another, they are subjected to the phonological rules of the language that borrows. In other words, although these borrowed words may introduce new things and concepts, they do not introduce new sounds to the borrowing language. Thus, such sounds as /v/ and /l/ as in violin that do not exist in the Japanese phonology are changed to /b/ and /r/ and violin is borrowed as as /bayorin/ in Japanese.

This phenomenon is of linguistic interest but what is psycholinguistically interesting is that, when a foreign word is introduced as a possible loanword together with its newly

coined equivalent in the borrowing language, the shorter of the two is usually adopted. When a borrowed word and its translation are of the same syllabic length, the translation is usually adopted. This is a conclusion which this author has reached after examining loanwords in Japanese. An example is the case where people in Japan borrowed the English word computer in preference over its translation denshi keisanki (=electronic computer) but discarded it later when the Japanese term was shortened to densanki. When department store was translated as hyakkaten in Japanese, the Japanese term became popular. However, when the English term was shortened to depaato, it completely replaced the Japanese term. (In the Japanese phonology hyakkaten is a five-syllable word.)

Another interesting observation is that, if foreign words are borrowed without their translations and if they happen to be polysyllabic but frequently used, they tend to be abbreviated or shortened. Thus, such words as department, apartment, puncture (=flat tire) and register (=cash register) are borrowed as depaato, apaato, panku and reji in Japanese. This phenomenon either confirms the psycholinguistic principle that the more frequently a word is used, the shorter it becomes through the process of abbreviation, or indicates that people have little tolerance for polysyllabic loanwords. It will be interesting to watch whether or not such polysyllabic words as sukiyaki, tempura and teriyaki, which are very frequently borrowed by the English-speaking people in Hawaii, will be shortened as the people keep using them.

In many languages borrowed words are not given full-fledged "citizenship" immediately. Certain written devices are applied to them so that they can be visually identified as borrowed words. In English, for example, borrowed words are often italicized or sometimes put in quotation marks. In Japanese one distinct system of writing called katakana is used in writing words borrowed from foreign languages except Chinese from which Japanese characters have come. This practice is official and mandatory in the sense that it is a governmental policy administered by the Ministry of Education. When almost 10% of the popularly used Japanese vocabulary is of Western origin, this practice makes the presence of borrowed words very conspicuous in Japanese writings. It is like reading English sentences 10% of whose words are italicized. This kind of practice may be considered as a kind of linguistic purism or nationalism. Research is needed on the possible psychological effects of this practice especially on children when they begin to learn how to write. They are made conscious through the writing systems of their languages that some or many of the words that they use as part of their "native vocabulary" are borrowed words from foreign languages.

Linguistic purism or nationalism seems to take many different forms. In countries like France and Israel borrowing foreign words is nationally discouraged. It is said that in Israel when a person has a lexical need to name a new concept or thing which he wants to introduce from a foreign country, he is required to go to a national language commission with a request for innovating a word of Hebrew etymology to meet his need. This policy is understandable because Israel is a new nation and is busy building its national identity. Similar policies on word-borrowing seem to have been adopted by other new nations including Indonesia.

Loanwords are like immigrants in many respects and there are analogous relations between the two. Both involve national sentiments in some way and, thus, both may receive governmental control. Both must go through a period of acculturation before they are given full-fledged "citizenship." In case of national emergencies like wars, both may be held in custody. This actually happened in Japan during World War II. As part of the nationalistic movement and the military efforts to "de-Westernize" Japan, the use of Western loanwords was discouraged throughout the nation. When the war ended in 1945, the people regained not only political but also linguistic freedom. What is different between immigrants and loanwords is that in the former case a set of procedures are usually specified regarding how an immigrant may obtain citizenship from the country of his new residence, whereas in the latter case there is no regulation of any kind on when and how a loanword may be "naturalized." For example, in English there is no rule on when and how a loanword may be "de-italicized." Such words as etc. and et al. are

rarely italicized in English nowadays, but words like ibid. and op. cit. still are. An important variable seems to be the frequency of usage. One principle on this matter seems to be that the more frequently a loanword is used, the faster it becomes "naturalized" and, as was discussed earlier, the shorter it becomes.

In the Japanese language those foreign words that were borrowed from Dutch and Portuguese more than a hundred years ago are completely "naturalized" and they are not treated differentially in any way. But those Western words borrowed since Meiji or 1868 are still written in katakana when indigenous words are written in either of the two other writing systems, hirakana or kanji, in accordance with a national policy. Unless a new policy on word-borrowing is adopted, Western loanwords in Japanese have no way of becoming "naturalized" in the writing system.

The above discussion may be applied to the grammatical aspect of loanwords. When a loanword is fully "naturalized," it is pluralized, nominalized or verbalized like an indigenous word. But until then it is treated as a foreign word and is often subjected to the grammatical rules of its original language. English provides good examples. The Japanese loanwords, geisha and yen, in English had not been pluralized until recently. Perhaps because of the increase in the frequency of usage and familiarity, geisha is now pluralized as geishas like focuses, criterias and datas. However, regardless of how many yen one has--one yen or 1,000 yen--, one does not pluralize it as yens as yet. This is true even in Hawaii where things Japanese are very familiar and Japanese loanwords are freely pluralized as in the case of zoris, obis, hibachis, and kimonos.

The examples that have been cited above seem to indicate that we can make comparative studies of the methods and processes of borrowing words and "naturalizing" them in various languages. Then we may be able to correlate the results of such studies to other aspects of the cultures involved. Word-borrowing appears to be a simple linguistic phenomenon on the surface, but in its social and psychological aspects we can find a microcosm of culture.

Words That Are Borrowed

The question of what words people borrow from other languages is worth pursuing, because it can reveal what they learn from other cultures. Once again an illustrative example is drawn from Japanese. As was mentioned earlier, English loanwords constitute a significant portion of the Japanese vocabulary. According to the analysis made by Ichikawa (1928), these loanwords fell into the categories shown in Table 3.

TABLE 3
Categories of English Loanwords In Japanese and Their Proportions.

Category	% of the Total Western Loanwords
sports	15.2
literature, music, art	12.4
food	10.8
machine, technology	8.9
science	8.6
clothing	8.5
school life	4.6
business, finance	4.6
home life, religion	4.1
housing, architecture	3.4
merchant marine	1.3
others	17.6
	100.0%

Further studies are needed to determine whether or not these percentage figures can be accepted as relative indexes of the kinds of things that Japanese have learned from the West, but a look at Japanese life gives the impression that these are acceptable indexes.

It seems that there is a grammatical constraint on word-borrowing, because words of certain parts of speech are more frequently borrowed than others. Of the 5,018 English loanwords in Japanese that Arakawa (1931) studied, 4,606 were nouns. It may be that this is not a result of any grammatical constraint but a reflection of the fact that what is learned from foreign cultures is mostly new things and concepts. The following table is taken from Arakawa's report:

TABLE 4
Parts of Speech of English Loanwords in Japanese and Their Proportions.

Parts of Speech	Number	% of the Total
noun	4,606	91.79
adjective	276	5.50
verb	104	2.07
adverb	22	0.44
preposition	6	0.12
pronoun	2	0.04
conjunction	2	0.04
	5,018	100.00%

Table 4 does not imply that if an English preposition is borrowed, it is used also as a preposition in Japanese. That would be grammatically incompatible, because Japanese is a postpositional language. In many cases words which are not nouns are borrowed as nouns in Japanese and they may later be transformed into other parts of speech by suffixing appropriate parts of speech or case markers. The results of a similar study conducted by the Japanese National Language Research Institute (1964) about three decades later closely approximated those presented above in Table 4.

As Jesperson (1922) noted, words that are borrowed are mostly so-called content words like nouns and adjectives. So-called function words like prepositions and conjunctions are rarely borrowed. Jesperson also stated that no one gives up those words that are "definitely woven into the innermost texture of his language" (p. 212). He cited personal pronouns and numerals as such words. However, as he himself found enough exceptions, this is not a firm principle, especially in the borrowing circumstances shown above in Diagrams 3 and 4. When this author (Higa, 1970) studied the Japanese spoken in Hawaii, he found that English pronouns like me and you and English numerals are very frequently used in it. In addition many English kinship terms and words related to the expression of time are frequently borrowed. In fact, loanwords of these kinds conspicuously characterize the Japanese spoken by Japanese immigrants in Hawaii as a dialect. They are conspicuous because many of them are unnecessarily borrowed in preference over their Japanese equivalents.

Jesperson (1922) tried to explain this kind of unnecessary borrowing as a result of the habit of borrowing words. Weinreich (1953) considered it as an interesting phenomenon and mentioned social prestige as its probable cause. The unnecessary word-borrowing in the Japanese spoken in Hawaii, as compared to the Japanese spoken in Japan, may be explained in terms of motivation. Word-borrowing in Japan is done to meet lexical needs primarily and social-psychological needs secondarily. However, this order of needs is reversed in the Japanese community in Hawaii where the basic needs are, as mentioned earlier, creation of a new dialect of its own for the purpose of establishing a group identity and then demonstration of degrees of acculturation in American culture. These needs are highly

complementary and they can be met by the use of borrowed words. Where social-psychological needs are important, words are often borrowed even unnecessarily.

A question we may raise at this point is: What words are considered as signs of acculturation? As far as the Japanese community in Hawaii is concerned, the answers seem to be clear. Borrowed words related to personal and social relations like pronouns and kinship terms, to the expression of time such as the days of the week, and to the expression of quantity like numerals, seem to be such words. This author is collecting data from other ethnic communities in Hawaii to test how universal this is. If this aspect of word-borrowing is shown to be true of other immigrant communities, one obvious implication for the teaching of English to new immigrants to Hawaii is to teach them first and thoroughly words of those categories mentioned above. Here are some sample words taken from Hawaiian Japanese: papa, mama, brother, sister, uncle, cousin, brother-in-law, me, you, Mr., Mrs., husband, wife, last year, one month, Monday, too late, long time, four times, nine, thirty, some, big, too much, more, etc. Such words as these that immigrants borrow unnecessarily seem to be good clues to the understanding of the nature and process of their acculturation.

English has borrowed only a few words from Japanese, but they are remarkably well selected to give a thumbnail sketch of Japanese culture. Some of these loanwords are: mikado, tycoon, samurai, harakiri, kamikaze, banzai, geisha, kimono, sake, and sukiyaki. This list of Japanese loanwords indicates that perhaps the best way for the Japanese people to reflect upon their culture is to study what Japanese words have been borrowed by other cultures. The same may be said of other peoples and their cultures. In other words, loanwords can function collectively as a mirror for the culture from whose language they are borrowed.

Extent to Which Words are Borrowed

There has not been research on the extent to which people can tolerate the use of borrowed words per sentence or per page. The current proportion of Western loanwords in the Japanese vocabulary is 10%, as quoted previously. Whether this figure will increase or not is difficult to predict. If a language is given a sufficient amount of time like two thousand years for culture contact, it may replace its vocabulary completely with borrowed words. (Table 1 shows that only about a third of the present Japanese vocabulary is indigenously Japanese.) Historically speaking, Japanese has borrowed a great number of words from other languages and so has English, but speakers of these languages are aware of only those recently borrowed words. It may be that as new words are borrowed, old loanwords are "naturalized" and the proportion of loanwords in the entire vocabulary is always kept under a certain level.

In the case of Hawaiian Japanese, this author's observation is that there is no quantitative or proportional limit on the use of borrowed English words as long as they are related to personal and social relations, time and quantity and the syntax remains Japanese. So, for instance, even the following kind of utterance is acceptable:

> "Me-wa you-no sister-no house-de teevee-o long time mita." (I watched the television in your sister's house for a long time.)

Seven out of the eight words in this sentence are borrowed English words. The case markers are clearly Japanese and they indicate that the syntax is definitely Japanese. One inference drawn from sentences of this kind is that without a restraint imposed by politically instituted linguistic nationalism a person is free to use as many borrowed words as he wishes as long as they are commonly accepted. And, as far as an ordinary citizen is concerned, there is no distinction between an indigenous word and a commonly used loanword. A loanword is only historically and etymologically foreign, but psychologically it is as indigenous as any other word once it is commonly used. It seems that it is the nature of linguistic nationalism that should be investigated rather than the extent of psychological tolerance for the use of loanwords.

Summary

The discussion in this paper centered around the notion that, although word-borrowing appears to be a simple and often random linguistic phenomenon, it is regulated by certain linguistic, psycholinguistic and sociolinguistic principles and its social-psychological aspects present academically interesting research topics to those who are interested in the nature and process of culture contact, culture learning, acculturation and linguistic nationalism. This author is convinced, through his past and on-going research on word-borrowing, that word-borrowing is a cultural behavior and its process and results reflect the basic aspects and characteristics of the cultures of both the borrowing and the borrowed.

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CULTURAL ASPECTS OF LANGUAGE IMPOSITION IN MALAYA, SINGAPORE, AND INDONESIA

VERNER C. BICKLEY
DIRECTOR
CULTURE LEARNING INSTITUTE
EAST-WEST CENTER

Introduction

This paper distinguishes Bahasa Malaysia (Malaysian language) and Bahasa Indonesia (Indonesian language) according to type and function and summarizes their development as the national-languages of Malaya,* Singapore and Indonesia. It presents a short, historical account of the spread, through religious and educational activities, of the English language in Malaya and Singapore and the Dutch language in Indonesia. Some instances in which these imposed languages became the languages of political and cultural protest and came into contact with the national languages are described and a tentative assessment of the present position and status of English and Dutch in the three countries is attempted.

Types of Languages in Malay, Singapore and Indonesia

When individual languages are compared, it is possible to distinguish them along scales in a typological classification. Stewart (1962) divides languages along one axis according to type and along a second axis according to function. The differentiation into types is made in terms of four attributes of which the first is Historicity (whether or not the language is the result of a process of development through use), the second Standardization (whether or not there exists for the language a codified set of grammatical and lexical norms which are formally accepted and learned by the language's users),[1] the third Vitality (whether or not the language has an existing community of native speakers) and the fourth Homogenicity (whether or not the language's basic lexicon and basic grammatical structure both derive from the same pre-stages of the language).

These four attributes can combine in various ways to produce (in Stewart's typology) seven language types, ranging from Standard to Marginal in descending order of social prestige. These are Standard, combining all four attributes; Classical, combining the first, second and fourth; Vernacular, combining the first, third and fourth; Creole, combining the first and third; Pidgin, marked only by the first attribute; Artificial, marked by the second attribute, and possibly by the fourth, and Marginal, marked possibly by the fourth attribute, but not by any other.

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*In this paper I am concerned only with the Malay Peninsula and not with the North-West Coastal area of the Island of Borneo (Sabah and Sarawak).

Examples of the first three types (Standard, Classical and Vernacular), the fifth (Pidgin) and the last (Marginal) are to be found in Malaya, Singapore and Indonesia. In Malaya and Singapore, various Chinese languages (particularly Kuo Yu, Hokkien and Chinese), Malay, English and Indian (e.g., Tamil) can be classified as Standard; high Tamil and 'Raja Malay'[2] as Classical; Kashmiri, Pashto and Arabic as Vernacular and English as Pidgin.[3] In Indonesia, Javanese, Sundanese, English, Dutch and Indonesian can be classified as Standard languages while Madurese, various Chinese languages and languages such as Balinese, Batak, Bugis and Minangkabau can be styled Vernaculars when they are spoken by persons originating from the regions in which the language communities of these particular languages are grouped.

In all three areas, a form of Malay is used as a Marginal language in households and in other limited situations. In Malaya and Singapore, it will have absorbed elements from different Chinese and Indian languages and dialects and of the English lexis, for example, 'Le'go-kan!' when the ball is going out of play in a football game and a player wishes it to go out; or 'pass tujoh' (pass seven) to describe a student who reached the grade formerly known as Standard Seven but who failed subsequent examinations. In Indonesia it may have some of the lexical and phonological characteristics of other Indonesian languages and dialects and of Dutch (e.g., kantur--office).

Languages which may be compared as to type may also be compared as to function. Different languages may have differing functions as media of communication within a state and each may perform several roles. The functional categories suggested by Stewart are (i) Official--the use of a language as the legally appropriate one for all political and culturally representative purposes, (ii) Group--the use of a language primarily by the members of a single ethnic or cultural group or sub-group, (iii) Wider Communication--the use of a language, other than an official one, for communication across language boundaries for purposes of trade and commerce within the nation, (iv) Educational--the use of a language, other than an official one, as a medium of instruction at some level of the educational system, (v) Literary--the use of a language, other than an official one, primarily for literary or scholarly activities, (vi) Religious-- the use of a language primarily in connection with the practice of a religion and (vii) Technical--the use of a language primarily as an access to international and scientific literature. These categories may, for the purpose of classification, be linked together and correlated with language types. Thus, in Malaya, English is a Standard language according to type and an official language according to function, sharing its classification as a Standard language and as an official language with Malay. In Singapore, English is an official language and, in common with Chinese, Malay and Tamil, a Standard language. In Indonesia, on the other hand, it is a Standard language, an educational language, a language of wider communication and a technical language, but it does not have the status of an official language.

Bahasa Malaysia and Bahasa Indonesia as National Languages

(a) Bahasa Malaysia:

Functioning as an official language, Malay is also the national language of Malaysia and is referred to as such in the Constitution. It is the national language of Singapore and one of the four languages which may be used in the legislative assembly.

The progress of the Malay language as a written medium and its development into a national language is connected with the growth of Malay literature. Winstedt (1940) regards Abdullah bin Kadir Munshi (Munshi Abdullah) as a principal contributor to the development of the Malay language, largely because of his skill as a biographer and his ability to comment vividly on the events of his own times. His interest in Malay philology, although never developed in his own work, was taken up by his son, Mohammad Ibrahim bin Abdul Kadi Munshi. Mohammad Ibrahim, who became secretary to the Sultan of Johore, wrote a children's reader, an account of five voyages to the West Coast of Malaya and a study of the Malay language which Winstedt believes may have encouraged the formation in 1888 of

a Society for learning and teaching linguistics. This Society which, among other activities, settled many Malay equivalents for English terms, was, after a period of inaction, revived in 1934 under a charter granted by the Sultan of Johore.

The Malay Translation Bureau, (now the Dewan Bahasa Nasional), founded in 1924 with the object of providing textbooks for the Malay-medium schools and the growth of Malay journalism which began in 1876 with the publication of the "Jawi Peranakan," gave fresh impetus to the language and encouraged the development of a modern literature. It was not, however, until after the Second World War and under the influence of feelings of nationalism that the bulk of Malay writers became convinced that their language could be used for modern, practical needs and as a medium of literary expression. According to Mohammad Taib Osman (1961), the failure of the Malay language to harness the energies of Malayan society before the war was because of the already entrenched position of English. There was also very little contact in the literary field between Indonesia and Malaya and this contributed to the unequal development of the language in the two countries. Although, however, the language developed at different speeds in Malaya, Singapore and Indonesia, it did not proceed in different directions.

(b) Bahasa Indonesia:

In Indonesia, the Malay language, originally a lingua franca of the area, was strengthened as a result of missionary enterprise, political expansion and the nationalistic aspirations of Indonesian writers and politicians. Malay was used to propagate the teachings of Islam and was adopted quite early by Protestant Ministers in the Moluccas in an effort to oust Portuguese Catholicism. It also served, as Halim (1971) has pointed out, as a practical medium of inter-regional and inter-insular communication for Indonesians and was used as a means of communication between the colonial government and the people at large.

Nationalism at first manifested itself in a growing demand for opportunities to learn Dutch because, by acquiring this language, Indonesians, according to Halim, hoped to benefit from better job opportunities, better pay, higher social status and the opportunity to learn and benefit from the "cultural and technological wealth" of the West. However, following the recommendations of the Indonesian Youth Congress of October 28, 1928, Malay was adopted as the language of the Indonesian nationalist movement and became one of the rallying points of the movement's struggle for independence. Alisjahbana (1961) noted that, in addition to the oath taken at the 1928 Congress at which the participants bound themselves to one fatherland, one nation and one language, several other factors were responsible for the development of Malay as the official and national language of the new Indonesia. These were the publication in Malay of an influential magazine, the "Pudjangga Baru" ("The Young Poet"), a ban placed on the use of Dutch during the Japanese occupation of the East Indies and the establishment in 1942 of a Committee to look into the development of the language.

The various factors which led to the adoption of Malay as the official and national language of Indonesia were not all of the same character. Some, like the publication of the literary magazine, had cultural implications. The relationship between language and culture, for example, had to be taken into account in the choice of vocabulary to express scientific and technological terms. Alisjahbana notes that one group of concerned Indonesians gave preference to terms derived from Sanskrit words, another group preferred words of Arabic origin and a third group plumped for words of Greco-Latin origin. The group which preferred Sanskrit words represented a nationalist section of the population which harked back to the Hindu period in Indonesian history. The preference for Arabic words came from a group influenced by Islam and Arabic culture and the last group represented Westernized, internationally oriented Indonesians whose ideal was an internationally uniform terminology.

The conscious efforts which were made to develop Bahasa Indonesia as the national language have been criticized recently on the grounds that language is dynamic and

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cannot (to use Alisjahbana's term) be "engineered" unless this dynamism is taken into account:

> "...the notion of 'language engineering' may be precisely what is needed in multilingual countries like Indonesia if the term means simply language development in such a way and to such an extent that it becomes capable of serving both as a language or science and technology and as a medium of communication in the daily affairs of the community."
> (Halim, p. 14)

The most important decisions affecting the choice of language for an independent Indonesia, however, were political in nature. The oath taken at the 1928 Congress and the inclusion of the Indonesian language in the Constitution were essential steps in the moves to achieve and maintain independence, establish a centralized government and unify a geographically scattered and linguistically complex area through the employment of a lingua franca as a common medium of communication. The Malay language became "Bahasa Indonesia," one of the symbols of nationalism and, after the Revolution against the Dutch, of the newly independent state.

Political motives similar to those which influenced the Indonesian nationalists have determined the linguistic policies of other newly independent states. Thus, in Singapore, Malay was nominated as the national language as an act of government policy aimed at unifying the island's different communities and creating a national consciousness. The choice of language was made when a rapprochement with Malaya occurred in 1963 and despite the fact that the majority of the population of the state is of Chinese race.

In multilingual Burma, feelings of nationalism which accompanied a desire for independent government towards the end of the Second World War and immediately after it, resulted in a radical alteration of language policy. The Report of the Education Policy Enquiry Committee published in Rangoon in 1946 stressed that the study of the dominant language in the country and the preservation of the national character were of great importance in modern Burma. The Committee abandoned previous conciliatory attitudes towards the rights of minority groups.[4] It maintained that since there were a number of minorities and the language of none was used in the economic and social intercourse of the country then it was obvious that the dominant language, the language of the majority, should be recognized and established in the educational system for the whole country. It should, in principle, be the main language of education. As a result of these statements made by the members of the 1946 Committee, reinforced by a Statement of Education Policy made in 1948, Burmese became the official language of the whole of Burma, including the Shan States and other 'non-Burmese' areas.

A well-documented case is India where linguism was listed by the Committee on Emotional Integration in 1961 as one of the forces threatening the unity of the nation.[5] The Committee, suggested that the study of the two 'link languages,' Hindi and English, be commenced at an early stage but also advocated that children should study either the mother-tongue or their regional language during the first five years of primary school education and stressed the importance 'for national integration' of introducing Indian languages as media of instruction for all stages of education.

The barriers to communication and understanding in multilingual countries such as India were strengthened by the fact that many were obliged to use a language not always native to the country for governmental, administrative and legal purposes. Non-native languages were implanted, sometimes replacing the indigenous languages and sometimes existing coterminously with them. Imposed by military and political authority and also for commercial reasons, these languages gained currency because of their prestige as languages of wider communication, or because they were media through which technological skills and jobs might be acquired, or because they purveyed and interpreted religions which were accepted by a large majority of the population.

The Imposed Languages and Missionary Education in Malaya, Singapore and Indonesia

As imposed languages in Malaya, Singapore and Indonesia, English and Dutch were introduced through the trading operations of the British and Dutch East India Companies and spread through religious and educational activities which were often related and which challenged established religious and educational systems.

(a) Malaya and Singapore:

The advent of missionaries in Malaya and Singapore began with the conquest of Malacca in 1511 by the Portuguese, Alfonso D'Albuquerque. Accompanying his fleet were eight Franciscan chaplains of whom, according to Lee(1963), six remained in Malacca after Albuquerque left for Goa. Thence followed the building of churches and the growth of Catholicism in Malacca which became a province of the diocese of Goa in 1557, taking under its authority Burma, Siam, Solor, Timor, Amboina and the Moluccas. In 1548, following a visit by St. Francis Xavier to Malacca, a school was opened with an initial enrollment of 180 students, but further direct educational work in the name of Catholic Christianity was somewhat neglected in Malaya and Singapore until the nineteenth century.

In 1641, the Portuguese in Malacca were besieged by the Dutch who eventually occupied the town, razing all the churches except one[6] and deporting nearly half of the 3,000 inhabitants so that, notes Winstedt (1935), only 1,603 Portuguese and Eurasians remained in and near Malacca at the end of the year. '...The Ouvider-General, the priests and the Jesuits and the Principal Portuguese' sailing 'in a Dutch ship for Negapatam, while the Portuguese troops were sent to Batavia...' Despite the hostility of the Protestant Dutch, the Portuguese and Eurasian survivors continued to practice their faith in secret, assimilated some of the Dutch merchants and soldiers so that many Eurasian Catholics in Malacca today have Dutch names, and preserved themselves as a distinct race with their own customs and language--lingua de christao--derived from sixteenth century Portuguese.

Until the arrival of the British and the East India Company in the Malayan Archipelago and the introduction of the English language into the area,[7] the languages of Portugal and Holland competed through Roman Catholicism and Protestantism with Arabic, the medium of instruction in the Koran schools of Islam which had flourished in the Malacca Sultanate from the beginning of the fifteenth century. The East India Company encouraged the spread of English. Pursuing a laissez faire policy in both commerce and religion and taking a gradual and evolutionary line in education, it assisted missionary societies of both Roman Catholic and Protestant persuasion to found (so runs an official letter to London written in 1823) '...schools to enlighten and improve its heathen subjects.' It also offered financial aid, provided that the English language was taught. Thus, the Penang Free School, founded in 1816 by the East India Company's chaplain, Rev. R. S. Hutchings had, as stated in a letter from the Governor to London, a regulation that '...any or all of the children may be instructed in reading and writing English.' The Catholic Free School which opened in Penang in 1829 used English as a medium of instruction and received a grant of $100 from the Government and a letter to the London Missionary Society of 23 November, 1826 notes that Thomas Beighton, a representative of the London Missionary Society, was allowed an increased grant for educational work because:

> 'The Government, adverting to the advantages it already derives from the schools established at this period, to the means which they open to the general extension of education amongst the native population and the further benefit that may reasonably be expected by making the instruction in the English language part of their object have been pleased to increase the allowance.'

The work of the Anglican church began officially in Malaya when Hutchings was appointed as the East India Company's chaplain in Penang and, according to the February, 1928 issue of the Singapore Diocesan Magazine, its influence was extended to Singapore in 1826 with the appointment of Rev. Robert Burns as chaplain. The various missions established were organized along linguistic lines so that the Chinese and Indian congregations

in particular tended to be racially homogeneous. Support from the Malays was so weak that only one church could be found in the whole of the diocese in which the services were conducted in Malay.[8] As more Chinese and Indians received an English-medium education, however, the English language services attracted a mixture of Europeans and Asians and helped to break down some of the cultural barriers, although they also tended to encourage the formation of an English-speaking elite.

The most important contributions made by the missions to Malaya and Singapore, apart from the spiritual benefits they disseminated among a proportion of the people, were in the field of education, and the educational systems benefited from their activities. English-medium 'aided' schools, in particular, were supported since they received the highest financial grants from the Government which considered it important to encourage overt missionary work among the Muslim population.

The missionaries, by their efforts in founding and maintaining these schools in Malaya and Singapore, can justly claim to be pioneers of English-language education in the country. However, the policy of giving maximum assistance to English-medium aided schools, while at the same time helping Chinese, Malay and Tamil-medium schools and encouraging the arrangement of church services according to linguistic groupings, postponed the establishment of social and cultural homogeneity among the different races of Malaya and Singapore. The English-speaking group in each area was but one of a number of community groups, each of which had its own affiliations and loyalties. Lack of social and cultural contact existed between the Chinese, Malay, Indian and European communities and, possibly in cases where siblings were educated at schools using different language media, between families within groups.

(b) Indonesia:

Missionary activity in the Netherlands East Indies during the period of the Dutch East India Company's rule was kept to a minimum because of the Company's desire to make the Church subservient to its commercial interests. According to Robequain (1959), a number of parishes were created in Dutch territory in the seventeenth and eighteenth centuries but there were no more than five ministers when the downfall of the Company came at the end of the eighteenth century. The assumption of administrative authority by the Netherlands Government coincided with increased efforts on the part of the various missions, and the Roman Catholic missions who landed at Batavia in 1808 were soon followed by Protestant groups sponsored mainly by the Netherlands Missionary Society.[9] Most of the converts were from the non-Muslim population and the most successful work was done in the Batak lands of Sumatra, in Timor, Amboina and the Minahasas. Kraemer (1958) notes that the Society first concentrated its efforts in the East of Java and eventually two mutually independent groups of Christians were created there. One group became very Europeanized, candidates for baptism being instructed in Malay and ultimately absorbed into the Dutch-speaking congregation of Sourabaja. The other group, founded by a Eurasian named Coolen, 'javanized Christianity beyond recognition,' and conducted all its business through the medium of Javanese.

Dutch Christian churches cannot be said to have attracted large numbers of the indigeneous peoples of Indonesia. To some extent, these churches became an integral part of Indonesian life, but their effect on the patterns of its culture was slight. The Dutch language was used for church services in a number of the main centres but, after 1957, with the departure of the bulk of the native Dutch and Dutch-Eurasian population, indigenous languages were reverted to. Djakarta has one church, founded at the beginning of the nineteenth century, in which services in the English language are conducted and an English Minister tends to the spiritual needs of the small native English community. It has little or no influence, however, on the spread of English among the Indonesian population.

Politics and the Imposed Languages

An imposed language may become the language of political and cultural protest and may so rebound against the occupying power that the political and educational skills learnt through its medium may be used to propagandize other languages.

In Indonesia, the leading figures in the nationalist movement were well versed in Dutch and made use of it to espouse the cause of Malay as the national language. Vreede-De Stuers (1960) notes that during the closing years of the nineteenth century and at the beginning of the twentieth, Kartini, an ardent feminist, corresponded with Stella Handelaar, a Dutch girl, on the topic of female emancipation and also with many people in her own country on a variety of subjects, including education for women and girls and the growth of a freer Indonesian society. Her letters which, according to the nationalist Tjipto Mangoenkoesoemo, indicated that she wished to see her people rouse themselves from the lethargic sleep in which they had been lost for centuries, were written in Dutch.

Grant (1964) points out that the founder of the multiracial anti-Dutch Indian party, Eduard Douwes Dekker, knew Dutch; Henrik Sneevliet, who created the Indies Social Democratic Association in 1914, was educated in the Netherlands; and the Perhimpoenan Indonesia (Indonesian Union), a nationalist group, was formed in 1922 by Indonesian students studying in Holland.

Among the politicians who took office after independence, Mohamad Hatta[10] and Sutan Sjahir[11] were at Universities in Holland and President Sukarno, although never educated overseas, nevertheless received the kind of education reserved for privileged Indonesians under the Dutch, spoke excellent Dutch and often delivered his speeches in a mixture of Indonesian, English, French and Dutch.[12]

The leading politicians and advocates of independence from British rule in Malaya and Singapore have all been able to make good use of the English language. The first Prime Minister of Malaya, Tengku Abdul Rahman and the present Prime Minister of Singapore, Mr. Lee Kuan Yew, attended English Universities and the first Chief Minister of Singapore, Mr. David Marshall, an alumnus (like Mr. Lee Kuan Yew) of Raffles Institution, one of the leading English-medium secondary schools on the island, is noted for the persuasiveness of his English when, as a leading lawyer, he speaks (usually for the defense) at criminal trials.

Although English in Malaya and Singapore and Dutch in Indonesia were employed, to some extent, as vehicles of political protestation, attitudes taken towards the two languages differed in the three areas.

A Dutch Royal Decree promulgated in 1918 permitted the use of Malay in conjunction with Dutch as the media for discussions in the Netherlands East Indies Volksraad (People's Council). However, according to Woodman (1955), in 1924 a Javanese member of the Council was widely criticized for making nationalist propaganda by speaking Malay in an assembly where only the Dutch language was normally used. Halim notes that Mohammad Yamin delivered a speech at the Youth Congress of 1926, in which he correctly predicted that Malay would be the future language of culture and unity of Indonesia. The speech was given in Dutch.

In Malaya and Singapore, the English language was seen by some to be a key to unlock the door leading to self-government. Speeches in the Malayan Federal Legislative Council were normally given in English although permission could be obtained to speak in Malay. The Honorable Enche Puteh, the only Malay woman member of the Council, asked for permission to speak in the Malay language when she addressed the Council on the subject of Malay education in March, 1948. J. B. Neilson (1949), a former Director of Education in Malaya, reported that '...part of her speech was devoted to a plea for greater facilities for Malays to enter English schools and for English to be taught in Malay schools. But she was faithfully interpreting the attitude of her own people, for by speaking in Malay

she emphasized their pride in their mother-tongue and by pressing for attention to English in the Malay school curriculum she stressed their desire to be educationally equipped for the battle of life.'

At the July 1947 meeting of the Singapore Advisory Council for Education, the (British) Director of Education was criticized by a Chinese member of the Council for advocating that teaching in the first stages should be through the medium of the mother-tongue:

> 'English remains the most important language in this country...parents of children of all races should be free to elect which of the schools they would like their children to enter and there should be no bar or compulsion. Otherwise the plan will be regarded as a move either to segregate the races or retard the development of English-language education. There should be free choice, otherwise Government will be imposing a heavy penalty, namely denial of English education as a price for providing vernacular education.... Let us, therefore, remove the bar. Otherwise this plan will operate as an impediment in the progress of the people of this country towards responsible self-government.'

The Educational Systems and The Imposed Languages

In each of the three countries under review, a Western-type academic education was provided through the medium of the imposed language and a second type of education developed using indigenous languages as media of instruction. An influx of immigrants from China and India during the nineteenth century resulted in the establishment of a third type of education whereby Chinese schools were established in Indonesia, and Chinese and Indian Tamil schools were opened in Malaya and Singapore.

Education of the first type received support from missionary societies and, in Malaya and Singapore particularly, missionary influence was strong. Most of the Chinese schools were founded and maintained by clans and other associations. The purpose of the Indian Tamil schools in Malaya and Singapore was to provide the sons and daughters of immigrant plantation workers with an elementary education and these schools were largely the responsibility of the estate managements.

Each of the three types of education was gradually systematized and each ultimately became subject to Government control.

While possessing certain features in common, the educational systems of Indonesia, Malaya and Singapore before independence differed in a number of respects. Education in Indonesia during the colonial period was stratified so as to provide horizontally and vertically for the needs of different social groups. The Dutch and other Europeans formed the most dominant group and as such their educational requirements were catered for on lines parallel to those in the Netherlands. There was exact concordance with Dutch schools, the same subjects were taught and the length of the courses provided and the number of class hours devoted to them were identical.

Apologists for the Dutch colonial regime have maintained that the differentiation between the Dutch and the Indigenous systems of education did not involve discrimination between groups and it is certainly true that every student, provided that he could pass the entrance examination, could meet the cost and could display some evidence of skill in the Dutch language, was eligible to enter any Dutch-medium school. Nevertheless, the majority of students in Dutch language schools were of Dutch nationality. In 1900 only one-ninth of the student population in Dutch public primary schools was Indonesian and forty years later only a third of the students in high schools above the M.U.L.O.[13] level were Indonesians. Dutch educational experts insisted that the Dutch-medium schools should be of a standard fully comparable to those in the Netherlands itself. They were, therefore, expensive to

maintain and the East Indies Government was slow to expand them. A policy of gradualism was also favored because there was little room in the country's plantation economy for Western-educated Indonesians. The rate of industrialization was slow to progress in the Indies and the increase between 1900 and 1930 was calculated by Furnivall (1944) to be only 3.6 per cent per annum.

When the pace of industrial development quickened somewhat after the First World War it was mainly concerned with the processing of primary products and only a fraction of the work connected with this development was of a type suitable for the Western-educated. As a result, the only employment open for many Indonesians who had attended Dutch-medium schools was government service and even in prosperous times vacancies in this service could not increase by a yearly rate of more than 2 per cent, whereas Western education of Indonesians was increasing, according to Kahin (1946) at a rate of nearly 7 per cent per annum. The reluctance of the Dutch to raise this rate was, therefore, logical in terms of the economic facts as they saw them. Similar economic factors influenced the British in the Federated Malay States and accounted for the care with which they supported the development of Malay-language schools and the trouble they took to find a curriculum suitable for the children of parents who were mainly engaged in rural, agricultural occupations.

While the opportunities open to Indonesians to obtain a Western-type schooling were limited, every effort was made to provide facilities for Dutch children. In 1930, as the Censuses conducted in that year indicated, 70 per cent of the Europeans living in the Indies were born there and, in common with their countrymen from Holland, they were employed in a great variety of occupations and at a number of levels. They filled senior posts at the tops of the civil service and commercial hierarchies, but they also worked as artisans and held positions at the rank of foreman and supervisor. Their living conditions in the cities and in the rural areas were adjusted to their financial and social status, their periods of leave in the Netherlands were few and many of them retired in the Indies after a lifetime's work in the country. In such circumstances they anticipated and were provided with an educational system which, up to the conclusion of the secondary phase, was virtually equal to that of the Netherlands.

The British, on the other hand, did not, as the Dutch did the Indies, regard Malaya and Singapore as 'home,' an extension of the mother country. Only rarely were they employed below the professional, executive and managerial level and retirement in the Malay States and Singapore was exceptional. They sent their children to small private schools in the chief cities, or to larger schools which were established at hill stations, until they reached the ages of seven or eight years, and then dispatched them to preparatory and 'public' schools in the United Kingdom to receive the major part of their education. A 'dual system' of education did not therefore develop in Malaya and Singapore if the term is taken to mean an arrangement whereby separate provision was made for Westerners and Western-oriented indigenes and the rest of the indigenous population and the Government did not assume any responsibility for the education of British or other European students. The imposed language was, nevertheless, used widely in the education system and, of the Malay-medium, Tamil-medium and English-medium schools, a secondary education could only be obtained in the latter until comparatively recent times. The entry into these schools was therefore multiracial although in Singapore, which has a predominately Chinese population, the Chinese were in the majority. Chinese parents in Malaya and Singapore were able to make a choice for their children between an education available in private, aided and ultimately Government schools through the medium of Kuo Yu and an education through the medium of English in aided and Government schools.

A similar choice of medium could be made in Indonesia except that education through the medium of Dutch implied, to some extent, racial separation. All the students in the Dutch-Chinese schools were Chinese, all the students in the Chinese language schools were Chinese and, if a student succeeded in gaining entry to a Dutch school, most of his fellow students would be Dutch and only a small minority would be of any other race.

The Present Position and Status of the Proposed Languages

The language of learning and the most important key to Western culture in the Netherlands East Indies was Dutch. It was the medium of instruction at the secondary level and despite the fact that a number of Indonesian intellectuals, influenced by nationalism, pressed for the development of Malay as the national language, its speakers, whether Dutch or Indonesian, enjoyed considerable social prestige. The revolutionary course steered by the nationalists following the Second World War, however, hardened their attitude towards Dutch so that ultimately a complete ban was placed on the use of the language after the confiscation of Dutch estates and other property in 1957 and the severance of diplomatic relations between Holland and Indonesia in 1960. It was not until recently that the ban was lifted and diplomatic relations restored.

The curricula of the secondary schools in the Netherlands East Indies included a number of non-Indonesian languages and these were taught as foreign languages. Amongst them was English, an important subject in the secondary schools of Holland and an essential choice for the syllabus in the Indies because it was widely used in neighboring countries. It was employed as a lingua franca between Dutch and other members of the business community and it was a world language, a common language for the conduct of international affairs. One consequence of the pre-war Dutch educational system which restricted higher education to a limited number of the indigenous peoples was that Indonesia was encouraged to turn to other Western powers for assistance after independence had been achieved. The volume of aid received from English-speaking countries after the 1939-1945 War stimulated the spread of the English language and emphasized its usefulness as a means of access to scientific and technical information. Dutch education policy was therefore one of the several factors responsible for the supersession of Dutch and the elevation of English into the position of first foreign language, a position which it still holds officially in the present education system.

The education imparted by the English-medium schools in Malaya and Singapore, although often said to be 'literary' in nature, was also vocational in that it provided adequate training for various categories of clerical and administrative employment and the parents were influenced by the career opportunities it offered to their children. This pressure to learn the English language increased as the economy of the two areas expanded through the success of the Malayan rubber and tin industries and the transformation of Singapore from a small fishing village to a large entrepot port.

The post-war policy in both Malaya and Singapore of steadily increasing the opportunities for all races to learn English in English-medium schools, the development of training courses for teachers of English in Chinese-medium schools and the introduction of English as a compulsory subject in all Malay, Chinese and Indian schools in 1956 did much to establish the language as a unifying force and offset the pre-war tendency of the English-medium schools to create an elite. This encouragement of a language which had international status and which could lead to qualification in technical and professional disciplines put many of the new skills within reach of the inhabitants and smoothed the path to independence by providing a core of trained personnel able to assume responsibilities previously exercised by expatriate officials.

The English language is now the first foreign language taught in schools and colleges in Indonesia and, although it no longer has the status of an official language, it is the major second language of the Malaysian educational system. In Singapore, it plays a major role in the schools as a medium of instruction and also as a second language. All three countries are members of the Southeast Asia Ministers of Education Organization which, in 1966, established a Regional English Language Center in Singapore for the purposes of improving standards of teaching English as a second or foreign language in the member countries. The importance of English for the region is acknowledged in the Organizations' catalog published in 1972:

'The enthusiastic participation in RELC activities by all eight SEAMEO countries indicates that they firmly believe in the benefits to be gained in terms of educational advancement and economic development from a common language for communication (i.e., English) both within the region and with countries outside Southeast Asia.'

FOOTNOTES

[1]All languages have grammatical structures and vocabularies which are subject to analysis and description. The question is 'whether or not the culture with which the language is traditionally associated has developed a formally accepted set of rules about the way in which the language is supposed to behave.' See Stewart (1962, p. 24)

[2]This is the language used in the courts of the Malay Sultans.

[3]This refers to language contacts made between Chinese speakers and speakers from various other groups. Stewart holds that Creole and Pidgin languages are the result of the development of a secondary language for wider communication in certain kinds of social and linguistic contact situations where grammatical and lexical material from different sources became fused. A Pidgin is such a language in its primary stage, when it is spoken only as a second language. See Stewart (1962, pp. 19, 20)

[4]As expressed, for example, in the Report of the Education Reconstruction Committee 1942, published by the Superintendent, Government Printing and Stationery, Burma, 1947, which recommended that indigenous vernacular languages other than Burmese and English should be permitted to be taught in Primary schools in which there was a majority of students whose mother tongues were neither Burmese nor English.

[5]See the Report of the Committee on Emotional Integration, Ministry of Education, India, 1962. Other forces listed were caste, communalism (in this case religious--Hindu and Muslim), provincialism, frustration among young people, and a lack of idealism.

[6]St. Paul's Church, built by the Portuguese, was turned into the Church of the Reformed Religion by the Dutch.

[7]The first British intrusion into the area occurred at Penang, acquired by treaty with the Sultan of Kedah in 1786, as the result of negotiations between the Sultan and Francis Light, acting firstly on behalf of the firm Jourdain, Sullivan and De Souza of Madra and then the East India Company. Parts of the British Law--and therefore the English language--were introduced in 1800. The first professional judge appointed in 1801 was a Mr. Dickens, uncle of the novelist. See Winstedt (1935).

[8]This was St. Andrew's School, Singapore, founded by the St. Andrew's Church Mission.

[9]The attention of the American Board of Commissioners for Foreign Missions was drawn to the Indies, and in particular, Sumatra, as a result of the publication of Sophia Raffles 'Memoir of Sir Stamford Raffles,' in 1830. The 'Memoir' deals extensively with Raffles' encouragement of the first missionary efforts in Sumatra. A preliminary survey of Java was made on the Board's behalf by David Abel in 1831 and his reports added to the Board's interest in the area. However, the murder in Sumatra of Samuel Munson and Henry Lyman, who had been appointed by the Board to explore Sumatra for mission possibilities, and the subsequent obstruction of American missions by the Dutch authorities prevented any development in the area until 1900, when the Seventh-Day Adventists established the first permanent American mission. See Gould (1961, pp. 112-118).

[10]Mr. Hatta, a Sumatran, studied in the Commercial College in Rotterdam. He held a Senior Specialist Award at the East-West Center, in Honolulu, Hawaii, from April to September, 1968.

[11]Sjahir married a Dutch lady while in Holland. His book Out of Exile, John Day, 1949, is an interesting account of the nationalist struggle.

[12]The writer attended the annual Graduation Day ceremony of the University of Indonesia held at the Djakarta Sports Stadium in September, 1963. President Sukarno gave an hour-long speech to the faculty and students present and used all four languages referred to.

[13]Meer Uitgebried Lager Onderwijs. These schools were established for Indonesian students in 1913. They provided two years of instruction at the post-primary level in Dutch. Successful students might qualify for admission to Dutch secondary schools.

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